



M3C Srl

Laboratorio/consegna campioni: Via G. G. Longo 25R 16155 Genova
Uffici operativi: Via Varenna 58A 16155 Genova
Sede Legale: Via Dei Reggio 15/9 16155 Genova
Tel: 010 8567337 Cell: 338 1393573 Email: info@m3csrl.it
P.IVA/C.F.: 02436250993 - Cap. Soc. 10.000 i.v. - REA: GE-486210

RELAZIONE TECNICA

ECO IMPIANTI CRV S.R.L.
Via L. Guerra, snc
ASTI (AT)

RELAZIONE SAMENESS
Art. 2.7d – Reg. UE 1906/2007
MATERIALE RECUPERATO

“TRUFFLE”

Indice

1. PREMESSA	2
2. DESCRIZIONE DELLA MISCELA E SUA CARATTERIZZAZIONE CHIMICA	3
3. STATO REGISTRAZIONE SOSTANZE CONTENUTE IN MISCELA	4
4. GIUDIZIO SUL PRODOTTO DA RECUPERO	4
5. ALLEGATI	5



M3C Srl

Laboratorio/consegna campioni: Via G. G. Longo 25R 16155 Genova
Uffici operativi: Via Varenna 58A 16155 Genova
Sede Legale: Via Dei Reggio 15/9 16155 Genova
Tel: 010 8567337 Cell: 338 1393573 Email: info@m3csrl.it
P.IVA/C.F.: 02436250993 - Cap. Soc. 10.000 i.v. - REA: GE-486210

1. PREMESSA

La ditta Eco Impianti CRV s.r.l. effettua attività di recupero rifiuti (Art. 208 D.Lgs. 152706 e ss.mm.ii.) nell'unità produttiva di Via Learco Guerra, SNC in Asti (AT) ed è autorizzata dalla Provincia di Asti con Autorizzazione Unica Ambientale D.D. 1686/2015 e ss.mm.ii. della Provincia di Asti.

L'attività consiste nell'esecuzione di operazioni di riduzione volumetrica per frantumazione, vagliatura, cernita e operazioni di miscelazione per la composizione delle diverse linee di PDR (prodotti da recupero).

In questo contesto i prodotti recuperati, indipendentemente dalla loro forma fisica, sono da considerarsi ai sensi del Regolamento Reach UE 1907/2006, come materia recuperata da rifiuti e quindi potenzialmente esente dagli obblighi di cui al regolamento stesso, come indicato al punto 7, lettera d) dell'art. 2, che recita "Sono esentate dagli obblighi di cui ai titoli II, V e VI [...] le sostanze che in quanto tali o in quanto componenti di preparati o contenute in articoli, registrate a norma del titolo II, recuperate nella Comunità se: i) la sostanza risultante dal processo di recupero è la stessa sostanza registrata a norma del titolo II; e ii) le informazioni prescritte dagli articoli 31 o 32 in merito alla sostanza registrata a norma del titolo II sono disponibili nello stabilimento che effettua il recupero".

Il prodotto Truffle è classificato non pericoloso ai sensi del Regolamento UE 1272/2008 e ss.mm.ii. ed è composto in prevalenza di calcio solfato diidrato (gesso), solfato di bario (barite), carbonato di calcio (whiterite) e carbonato di calcio. In stabilimento è presente una scheda dati di sicurezza come previsto dall'articolo 31 da fornire agli utilizzatori a valle, e sono inoltre presenti in stabilimento le informazioni previste dagli articoli 31 e 32 per le costituenti il prodotto.

La presente relazione è redatta per rispondere alla valutazione della eguaglianza (sameness) tra il prodotto recuperato e il prodotto somigliante già registrato ai sensi del titolo II del Regolamento UE 1907/2006.



M3C Srl

Laboratorio/consegna campioni: Via G. G. Longo 25R 16155 Genova
Uffici operativi: Via Varenna 58A 16155 Genova
Sede Legale: Via Dei Reggio 15/9 16155 Genova
Tel: 010 8567337 Cell: 338 1393573 Email: info@m3csrl.it
P.IVA/C.F.: 02436250993 - Cap. Soc. 10.000 i.v. - REA: GE-486210

2. DESCRIZIONE DELLA MISCELA E SUA CARATTERIZZAZIONE CHIMICA

Il prodotto TRUFFLE è costituito di materiale gesso recuperato da rifiuti, EER 06.03.14 “sali e loro soluzioni scarti dell'industria di lavorazione del gesso”, attraverso attività di cernita, lavorazione meccanica, omogeneizzazione, asciugatura e miscelazione.

Il prodotto TRUFFLE è inorganico e composto da:

- Gesso ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) componente 10-30%
- Anidrite (CaSO_4) componente 15-25%
- Calcio carbonato (CaCO_3) impurezza 5-15%
- Bario carbonato (BaCO_3) componente 20-30%

Relativamente alle componenti principali della miscela, queste sono riconducibili a minerali di origine naturale non soggetti a registrazione Reach, ovvero a sostanze registrate da più di 50 produttori, con registrazioni afferenti sia a sostanze pure che a sostanze aventi gradi di impurezza con tenore delle sostane considerate tra l'80% e il 95%.

Il calcio carbonato è l'impurezza di maggior rilievo presente nel prodotto solfato di calcio diidrato, con concentrazione simile a quella presente in TRUFFLE. Queste impurezze sono afferibili a “naturally occurring substances” indicate nel dossier di registrazione di almeno un produttore.

Non sono presenti altre impurezze caratteristiche delle singole sostanze.

Le analisi eseguite sul rifiuto in ingresso mostrano la sostanziale assenza (< 0,1%) di metalli pesanti, idrocarburi, solventi e altri inquinanti riconducibili al ciclo di produzione dei rifiuti. Queste impurezze non sono da considerare sostanze pure e non sono considerate per la valutazione della Sameness, in quanto la sostanza registrata le può anch'essa contenere in tracce (Ad Es: RdP 21/000234136 del 30/04/2021 di Chelab s.r.l.).

La verifica della composizione della sostanza è effettuata attraverso periodiche analisi composizionali dalle quali si evince che il prodotto è ad alto tenore di solfati (> 25%), con contenuto in solfato di bario e carbonato di Bario (Ad Es: RP 210927609 del 30/09/21 e RP 211228090 del 27/12/2021 di AsChem s.r.l.).



M3C Srl

Laboratorio/consegna campioni: Via G. G. Longo 25R 16155 Genova
Uffici operativi: Via Varenna 58A 16155 Genova
Sede Legale: Via Dei Reggio 15/9 16155 Genova
Tel: 010 8567337 Cell: 338 1393573 Email: info@m3csrl.it
P.IVA/C.F.: 02436250993 - Cap. Soc. 10.000 i.v. - REA: GE-486210

3. STATO REGISTRAZIONE SOSTANZE CONTENUTE IN MISCELA

Le sostanze ricercate nei database ECHA ai fini della verifica della Sameness sono di seguito elencate assieme agli opportuni riferimenti:

Sostanza	Numero di registrazione	Impurezze	Sameness
Calcio Solfato Diidrato Calcio Solfato Diidrato di sintesi Gesso	01-2119444918-26-XXXX	Naturally occurring substances (es: calcium carbonate)	Si
Bario Solfato	01-2119491274-35-XXXX	No	Si
Bario Carbonato Whiterite	01-2119489177-25-XXXX	No	Si

La sostanza, come riferito nel dossier di registrazione della sostanza Calcio Solfato Diidrato, indica che non siamo in presenza di un SVHC e che non vi sono SVHC come impurezze in misura superiore allo 0,1%. Essendo la sostanza inorganica non si rileva l'applicabilità di effetti PBT e vPvB.

La sostanza registrata non è soggetta a restrizioni di cui all'allegato XVII del Reg. Reach 1907/2006.

La sostanza registrata non è ricompresa nell'elenco di sostanze che richiedono l'autorizzazione per l'utilizzo e la commercializzazione (Allegato XIV del Reg. Reach 1907/2006).

4. GIUDIZIO SUL PRODOTTO DA RECUPERO

Il prodotto da recupero ottenuto dalle attività della ECOIMPIANTI CRV S.r.l. è costituito dalle sostanze di cui alla tabella 3.1, che risulta registrata.

Considerato che:

1. la Società ha adempiuto alla classificazione della sostanza ai sensi del regolamento UE 1272/2008 e s.m.i. e alla redazione di una scheda dati di sicurezza, come previsto dall'art. 31 del Regolamento UE 1907/2006 e s.m.i.;
2. la sostanza risulta già registrata ed è dimostrabile la sameness con la sostanza recuperata ai sensi del Regolamento UE 1907/2006 e s.m.i.;
3. la Società ha conservate in azienda le informazioni di cui agli articoli 31 o 32 del Regolamento UE 1907/2006 e s.m.i. per la sostanza;



M3C Srl

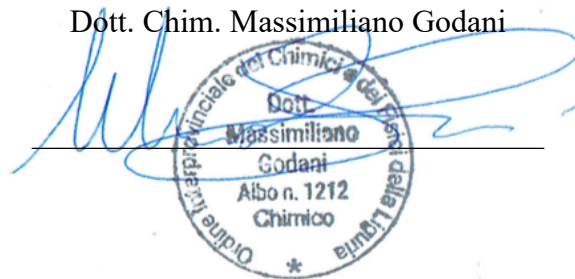
Laboratorio/consegna campioni: Via G. G. Longo 25R 16155 Genova
Uffici operativi: Via Varenna 58A 16155 Genova
Sede Legale: Via Dei Reggio 15/9 16155 Genova
Tel: 010 8567337 Cell: 338 1393573 Email: info@m3csrl.it
P.IVA/C.F.: 02436250993 - Cap. Soc. 10.000 i.v. - REA: GE-486210

si considera applicabile l'esenzione da registrazione, ai sensi dell'art. 2, c. 7 lettera d del Regolamento UE 1907/2006 e s.m.i. per il prodotto TRUFFLE.

5. ALLEGATI

1. Analisi chimiche del rifiuto in ingresso al trattamento per la produzione del prodotto Truffle
2. Brief Profile di registrazione sostanza "calcio solfato diidrato", "bario solfato", "bario carbonato"
3. Scheda di sicurezza del prodotto Truffle

Dott. Chim. Massimiliano Godani



RAPPORTO DI PROVA 21/000234136

ANNULLA E SOSTITUISCE IL RAPPORTO DI PROVA 21/000217659

data di emissione 25/05/2021

Codice intestatario 0070273/002

Spett.le
MOSAICO SPA
VIA P.F.CALVI, 15 - C.P. 107
33028 TOLMEZZO (UD)
IT

Dati campione

Numero di accettazione 21.047526.0003
Consegnato da Sig. Dario Calzavara il 30/04/2021
Data ricevimento 30/04/2021
Proveniente da MOSAICO SPA - VIA P.F.CALVI, 15 - C.P. 107 33028 TOLMEZZO (UD) IT
Matrice RIFIUTO SOLIDO
Descrizione campione GESSO IN POLVERE - E.E.R.: 060314 - PIANO DI CAMPIONAMENTO N. 21.000062 - VERBALE DI CAMPIONAMENTO N. 21.207333 - PRELIEVO DEL 30/04/2021

Dati campionamento

Campionato da Ns. tecnico Sig. Dario Calzavara il 30/04/2021
Metodo di campionamento UNI 10802:2013, UNI TR 11682:2017*, UNI EN 14899:2006*, UNI CEN/TR 15310-1:2013*, SCHEDA CAMPIONAMENTO N.34

RISULTATI ANALITICI

	Valore/ Incertezza	U.M.	Valori di riferimento	Riferimenti	RL	R	Data inizio fine analisi	Unità op.	Ri ga
ANALISI ESEGUITE AL PRELIEVO									
									1
ASPETTO							30/04/2021- -03/05/2021	02	2
Met.: MP 1406 rev 1 2010									
Colore	vario								3 *
Odore	non applicabile per uso maschere D.P.I.								4 *
	Valore/ Incertezza	U.M.	Classi di pericolosità	Frase di rischio	RL	R	Data inizio fine analisi	Unità op.	Riga
SUL CAMPIONE TAL QUALE									
									5
PESO SPECIFICO APPARENTE	1,74±0,22	kg/dm ³					04/05/2021- -05/05/2021	02	6
Met.: ASTM D 5057-17									
INFIAMMABILITA'							04/05/2021- -12/05/2021	02	7
Met.: ST/SG/AC.10/11/Rev.4 Met. 33.2.1									
Prova preliminare	non infiammabile								8 *
pH	5,53±0,67						04/05/2021- -06/05/2021	02	9
Met.: CNR IRSA 1 Q 64 VOL3 + APAT CNR IRSA 2060									
AZOTO AMMONIACALE	500±72	mg/kg (come N)			100	100.9#	04/05/2021- -06/05/2021	02	10 *
Met.: APHA 4500-NH3 B/C 2017									
SOSTANZA SECCA	68,8±0,1	g/100 g			0,10		04/05/2021- -06/05/2021	02	11 *
Met.: UNI EN 14346:2007 MET A									
SOLFATI	87 000±12 000	mg/kg (come SO ₄)			10	104.56 #	04/05/2021- -11/05/2021	02	12
Met.: EPA 9056 A 2007									
RESIDUO A 600 °C	57,24±0,53	g/100 g			0,10		04/05/2021- -06/05/2021	02	13
Met.: APHA 2540 G 2017									
DIPENTENE	< RL	mg/kg	HP3 HP4 HP13 HP14	Flam. Liq. 3 H226, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,40	102.3#	04/05/2021- -07/05/2021	02	14
Met.: EPA 5021A 2014 + EPA 8260 D 2018									
ANTIMONIO	< RL	mg/kg	HP6 HP14	Acute Tox. 4 H332, Acute Tox. 4 H302, Aquatic Chronic 2 H411	10	104.79 #	04/05/2021- -06/05/2021	02	15
Met.: UNI EN 13657:2004 + EPA 6010 D 2018									
ARSENICO	< RL	mg/kg	HP6 HP14	Acute Tox. 3 H331, Acute Tox.3 H301, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	2,0	99.43#	04/05/2021- -06/05/2021	02	16
Met.: UNI EN 13657:2004 + EPA 6010 D 2018									
CADMIO	< RL	mg/kg	HP6 HP14	Acute Tox. 4 H332, Acute Tox. 4 H312, Acute Tox. 4 H302, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,50	106.05 #	04/05/2021- -06/05/2021	02	17
Met.: UNI EN 13657:2004 + EPA 6010 D 2018									
CROMO ESAVALENTE	< RL	mg/kg	HP7 HP13 HP14	Carc. 1B H350i, Skin Sens. 1 H317, Aquatic Acute 1 H400,	1,0	101.9#	04/05/2021- -06/05/2021	02	18
Met.: EPA 3060 A 1996 + EPA 7196 A 1992									

RISULTATI ANALITICI

	Valore/ Incertezza	U.M.	Classi di pericolosità	Fraresi di rischio	RL	R	Data inizio fine analisi	Unità op.	Ri ga
MERCURIO Met.: UNI EN 13657:2004 + EPA 6010 D 2018	< RL	mg/kg	HP5 HP6 HP10 HP14	Aquatic Chronic 1 H410 STOT RE 1 H372, Acute Tox. 2 H330, Repr. 1B H360D, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	1,0	101.98 #	04/05/2021- -06/05/2021	02	19
NICHEL Met.: UNI EN 13657:2004 + EPA 6010 D 2018	< RL	mg/kg	HP5 HP7 HP13	STOT RE 1 H372, Carc. 2 H351, Skin Sens. 1 H317	1,0	105.29 #	04/05/2021- -06/05/2021	02	20
PIOMBO Met.: UNI EN 13657:2004 + EPA 6010 D 2018	3,01±0,52	mg/kg	HP5 HP6 HP10 HP14	Acute Tox. 4 H332, Acute Tox. 4 H302, STOT RE 2 H373, Repr. 1A H360Df, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	2,0	106.83 #	04/05/2021- -06/05/2021	02	21
RAME Met.: UNI EN 13657:2004 + EPA 6010 D 2018	2,57±0,52	mg/kg			1,0	104.38 #	04/05/2021- -06/05/2021	02	22
SELENIO Met.: UNI EN 13657:2004 + EPA 6010 D 2018	< RL	mg/kg	HP5 HP6 HP14	STOT RE 2 H373, Acute Tox. 3 H331, Acute Tox.3 H301, Aquatic Chronic 4 H413	10	105.58 #	04/05/2021- -06/05/2021	02	23
STAGNO Met.: UNI EN 13657:2004 + EPA 6010 D 2018	2,75±0,75	mg/kg			2,0	112.51 #	04/05/2021- -06/05/2021	02	24
TALLIO Met.: UNI EN 13657:2004 + EPA 6010 D 2018	< RL	mg/kg	HP5 HP6 HP14	STOT RE 2 H373, Acute Tox. 2 H330, Acute Tox. 2 H300, STO RE 2 H373, Aquatic Chronic 4 H413	2,0	112.23 #	04/05/2021- -06/05/2021	02	25
TELLURIO Met.: UNI EN 13657:2004 + EPA 6010 D 2018	< RL	mg/kg			20	106.29 #	04/05/2021- -06/05/2021	02	26
ZINCO Met.: UNI EN 13657:2004 + EPA 6010 D 2018	3,04±0,39	mg/kg			1,0	114.99 #	04/05/2021- -06/05/2021	02	27
COMPOSTI AROMATICI Met.: EPA 5021A 2014 + EPA 8260 D 2018							04/05/2021- -07/05/2021	02	28
Benzene	< RL	mg/kg	HP3 HP4 HP5 HP7 HP11	Flam. Liq. 2 H225, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Asp. Tox. 1 H304, STOT RE 1 H372, Carc. 1A H350, Muta. 1B H340	0,40	101.53 #			29
Etilbenzene	< RL	mg/kg	HP3 HP5 HP6	Flam. Liq. 2 H225, Acute Tox. 4 H332, STOT	0,40	101.53 #			30

RISULTATI ANALITICI

	Valore/ Incertezza	U.M.	Classi di pericolosità	Fraresi di rischio	RL	R	Data inizio fine analisi	Unità op.	Ri ga
Stirene	< RL	mg/kg	HP3 HP4 HP5 HP6 HP10	RE 2 H373, Asp. Tox. 1 H304 Flam. Liq. 3 H226, Eye Irrit. 2 H319, Skin Irrit. 2 H315, Acute Tox. 4 H332, Repr. 2 H361d, STOT RE 1 H372	0,40	101.53 #			31
Toluene	< RL	mg/kg	HP3 HP4 HP5 HP10	Flam. Liq. 2 H225, Skin Irrit. 2 H315, STOT RE 2 H373, STOT SE 3 H336, Asp. Tox. 1 H304, Repr. 2 H361d	0,40	101.53 #			32
(m+p) Xileni	< RL	mg/kg			0,80	101.53 #			33
Xileni	<0,80	mg/kg	HP3 HP4 HP6	Flam. Liq. 3 H226, Skin Irrit. 2 H315, Acute Tox. 4 H332, Acute Tox. 4 H312					34
O-xilene	< RL	mg/kg			0,40	101.53 #			35
M-xilene	<0,40	mg/kg							36
P-xilene	<0,40	mg/kg							37
Isopropilbenzene	< RL	mg/kg	HP3 HP5 HP14	Flam. Liq. 3 H226, STOT SE 3 H335, Asp. Tox. 1 H304 , Aquatic Chronic 2 H411	0,40	101.53 #			38
N-propil benzene	< RL	mg/kg	HP3 HP5 HP14	Flam. Liq. 3 H226, STOT SE 3 H335, Asp. Tox. 1 H304, Aquatic Chronic 2 H411	0,40	101.53 #			39
4-etiltoluene	< RL	mg/kg			0,40	75.9#			40
3-etiltoluene	< RL	mg/kg			0,40	101.53 #			41
1,3,5-trimetilbenzene	< RL	mg/kg	HP3 HP5 HP14	Flam. Liq. 3 H226, STOT SE 3 H335, Aquatic Chronic 2 H411	0,40	101.53 #			42
2-etiltoluene	< RL	mg/kg			0,40	101.53 #			43
4-isopropil toluene	< RL	mg/kg			0,40	101.53 #			44
1,2,4-trimetilbenzene	< RL	mg/kg	HP3 HP4 HP5 HP6 HP14	Flam. Liq. 3 H226, Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315,	0,40	101.53 #			45

RISULTATI ANALITICI

	Valore/ Incertezza	U.M.	Classi di pericolosità	Fraresi di rischio	RL	R	Data inizio fine analisi	Unità op.	Ri ga
				Acute Tox. 4 H332, Aquatic Chronic 2 H411					
N-butil benzene	< RL	mg/kg			0,40	101.53 #			46
1,2,3-trimetilbenzene	< RL	mg/kg			0,40	101.53 #			47
IDROCARBURI POLICICLICI AROMATICI Met.: EPA 3550 C 2007 + EPA 8270 E 2018							04/05/2021- -06/05/2021	02	48
Naftalene	0,187±0,080	mg/kg	HP6 HP7 HP14	Acute Tox. 4 H302, Carc. 2 H351, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			49
Acenaftilene	< RL	mg/kg			0,10	104.13 #			50
Acenaftene	< RL	mg/kg			0,10	104.13 #			51
Fluorene	< RL	mg/kg			0,10	104.13 #			52
Fenantrene	< RL	mg/kg			0,10	104.13 #			53
Antracene	< RL	mg/kg			0,10	104.13 #			54
Fluorantene	< RL	mg/kg			0,10	104.13 #			55
Pirene	< RL	mg/kg			0,10	104.13 #			56
Benzo (a) antracene	< RL	mg/kg	HP7 HP14	Carc. 1B H350, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			57
Crisene	< RL	mg/kg	HP7 HP11 HP14	Carc. 1B H350, Muta 2 H341, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			58
Benzo (b) fluorantene	< RL	mg/kg	HP7 HP14	Carc. 1B H350, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			59
Benzo (k) fluorantene	< RL	mg/kg	HP7 HP14	Carc. 1B H350, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			60
Benzo (j) fluorantene	< RL	mg/kg	HP7 HP14	Carc. 1B H350, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			61
Benzo (e) pirene	< RL	mg/kg	HP7 HP14	Carc. 1B H350, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			62
Benzo (a) pirene	< RL	mg/kg	HP7 HP10 HP11 HP13 HP14	Carc. 1B H350, Repr. 1B H360FD, Muta.	0,10	104.13 #			63

RISULTATI ANALITICI

	Valore/ Incertezza	U.M.	Classi di pericolosità	Frasi di rischio	RL	R	Data inizio fine analisi	Unità op.	Ri ga
				1B H340, Skin Sens. 1 H317, Aquatic Acute 1 H400, Aquatic Chronic 1 H410					
Indeno (1,2,3-cd) pirene	< RL	mg/kg			0,10	104.13 #			64
Dibenzo (a,h) antracene	< RL	mg/kg	HP7 HP14	Carc. 1B H350, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	0,10	104.13 #			65
Benzo (g,h,i) perilene	< RL	mg/kg			0,10	104.13 #			66
Dibenzo (a,l) pirene	< RL	mg/kg			0,10	104.13 #			67
Dibenzo (a,e) pirene	< RL	mg/kg			0,10	104.13 #			68
Dibenzo (a, i) pirene	< RL	mg/kg			0,10	104.13 #			69
Dibenzo (a,h) pirene	< RL	mg/kg			0,10	104.13 #			70
1,3-BUTADIENE Met.: EPA 5021A 2014 + EPA 8260 D 2018	< RL	mg/kg	HP3 HP7 HP11	Flam. Gas. 1 H220, Carc. 1A H350, Muta. 1B H340	0,40	102.3#	04/05/2021- -07/05/2021	02	71 *
IDROCARBURI C>10 (C10-C40) Met.: UNI EN 14039:2005	< RL	mg/kg			50	101.37 #	04/05/2021- -13/05/2021	02	72
IDROCARBURI < C12 Met.: EPA 5021A 2014 + EPA 8015 D 2003	< RL	mg/kg			5,0	106.38 #	04/05/2021- -13/05/2021	02	73
IDROCARBURI > C12 Met.: UNI EN 14039:2005	< RL	mg/kg			50	101.37 #	04/05/2021- -06/05/2021	02	74
SOMMA IDROCARBURI (<C12 + >C12) Met.: MP 0577 rev 3 2013	<50	mg/kg					04/05/2021- -13/05/2021	02	75 *
IDROCARBURI ALIFATICI C5-C8 Met.: EPA 5021A 2014 + EPA 8015 D 2003	< RL	mg/kg			5,0	106.38 #	04/05/2021- -13/05/2021	02	76
ELEMENTI (XRF) Met.: UNI EN 15309:2007							04/05/2021- -05/05/2021	02	77
Alluminio	< RL	g/100 g (come Al ₂ O ₃)			0,019				78
Antimonio	< RL	mg/kg	HP6 HP14	Acute Tox. 4 H332, Acute Tox. 4 H302, Aquatic Chronic 2 H411	10				79
Argento	< RL	mg/kg (come Ag)			30				80
Arsenico	< RL	mg/kg	HP6 HP14	Acute Tox. 3 H331, Acute Tox.3 H301, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	50				81
Bario	0,0112±0,0030	g/100 g (come BaO)			0,0022				82
Cadmio	< RL	mg/kg	HP6 HP14	Acute Tox. 4 H332, Acute Tox. 4 H312, Acute Tox. 4 H302, Aquatic Acute 1	10				83

RISULTATI ANALITICI

	Valore/ Incertezza	U.M.	Classi di pericolosità	Frasi di rischio	RL	R	Data inizio fine analisi	Unità op.	Ri ga
				H400, Aquatic Chronic 1 H410					
Calcio	23,1±4,9	g/100 g (come CaO)			0,014				84
Cerio	< RL	mg/kg (come Ce)			40				85
Cloro	135±42	mg/kg (come Cl)			44				86
Cobalto	< RL	mg/kg (come Co)	HP13 HP14	Resp. Sens. 1 H334, Skin Sens. 1 H317, Aquatic Chronic 4 H413	50				87
Cromo	< RL	mg/kg (come Cr)			10				88
Ferro	< RL	g/100 g (come Fe2O3)			0,0057				89
Fosforo	< RL	g/100 g (come P2O5)			0,039				90
Iodio	< RL	mg/kg (come I)	HP6 HP14	Acute Tox. 4 H332, Acute Tox. 4 H312, Aquatic Acute 1 H400	100				91
Magnesio	< RL	g/100 g (come MgO)			0,10				92
Manganese	< RL	g/100 g (come MnO)			0,0048				93
Mercurio	< RL	mg/kg	HP5 HP6 HP10 HP14	STOT RE 1 H372, Acute Tox. 2 H330, Repr. 1B H360D, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	20				94
Molibdeno	< RL	mg/kg (come Mo)			20				95
Nichel	< RL	mg/kg	HP5 HP7 HP13	STOT RE 1 H372, Carc. 2 H351, Skin Sens. 1 H317	20				96
Piombo	< RL	mg/kg	HP5 HP6 HP10 HP14	Acute Tox. 4 H332, Acute Tox. 4 H302, STOT RE 2 H373, Repr. 1A H360Df, Aquatic Acute 1 H400, Aquatic Chronic 1 H410	50				97
Potassio	0,075±0,019	g/100 g (come K2O)			0,011				98
Rame	< RL	mg/kg			20				99
Rubidio	< RL	mg/kg (come Rb)			50				100 *
Selenio	< RL	mg/kg	HP5 HP6 HP14	STOT RE 2 H373, Acute Tox. 3 H331, Acute Tox.3 H301, Aquatic Chronic 4 H413	20				101
Silicio	< RL	g/100 g (come SiO2)			0,038				102

RISULTATI ANALITICI

	Valore/ Incertezza	U.M.	Classi di pericolosità	Frase di rischio	RL	R	Data inizio fine analisi	Unità op.	Ri ga
Sodio	< RL	g/100 g (come Na ₂ O)			0,10				103
Stagno	< RL	mg/kg (come Sn)			50				104
Stronzio	115±32	mg/kg (come Sr)			29				105
Tallio	< RL	mg/kg	HP5 HP6 HP14	STOT RE 2 H373, Acute Tox. 2 H330, Acute Tox. 2 H300, STO RE 2 H373, Aquatic Chronic 4 H413	50				106
Tellurio	< RL	mg/kg (come Te)			50				107
Titanio	< RL	g/100 g (come TiO ₂)			0,0050				108
Vanadio	< RL	mg/kg (come V)			20				109
Zinco	< RL	mg/kg			50				110
Zirconio	< RL	mg/kg (come Zr)			20				111
Zolfo	134 000 ±31 000	mg/kg (come S)	HP4	Skin Irrit. 2 H315	28				112
Bromo	< RL	mg/kg (come Br)	HP6 HP8 HP14	Acute Tox. 2 H330, Skin Corr. 1A H314, Aquatic Acute 1 H400	80				113

Unità Operative

Unità 02 : Via Castellana Resana (TV)

Informazioni sui metodi di prova e/o requisiti/specifiche

Riga (7) - Metodo: ST/SG/AC.10/11/Rev.4 Met. 33.2.1 = Metodo: ST/SG/AC.10/11/Rev.4 Met. 33.2.1 = Manuale delle prove e dei criteri ADR rev. 4 2003 Met. 33.2.1

Il risultato "infiammabile" è riferito alla prova preliminare eseguita secondo la parte III sez. 33.2.1 del manuale delle prove e dei criteri dell'ADR. Al campione non viene attribuita la classe di pericolo HP3 se il tempo di combustione è superiore ai 45 secondi previsti dal metodo sopra indicato. Il test di superamento zona umida serve per definire il gruppo di imballaggio ai fini dell'ADR.

Riga (9) - Metodo: CNR IRSA 1 Q 64 VOL3 + APAT CNR IRSA 2060 = CNR IRSA 1 Q 64 VOL 3 1985 + APAT CNR IRSA 2060 Man 29 2003

Riga (10) - Metodo: APHA 4500-NH3 B/C 2017 = APHA Standard Methods for Examination of Water and Wastewater, ed 23rd 2017, 4500-NH3 B/C

Riga (12) - Metodo: EPA 9056 A 2007 = I controlli qualità applicabili risultano all'interno dei parametri statistici calcolati.

Riga (13) - Metodo: APHA 2540 G 2017 = APHA Standard Methods for Examination of Water and Wastewater, ed 23rd 2017, 2540 G

Riga (14), (28), (71) - Metodo: EPA 5021A 2014 + EPA 8260 D 2018 = Per le analisi effettuate con i metodi elencati, il recupero dei surrogati è risultato compreso tra 70% e 130% così come previsto dal metodo.

Riga (15-17), (19-27) - Metodo: UNI EN 13657:2004 + EPA 6010 D 2018 = Per le analisi effettuate con il metodo EPA 6010, il recupero dell'LCS (laboratory control sample) è risultato compreso tra 80% e 120% così come previsto dal metodo.

Riga (18) - Metodo: EPA 3060 A 1996 + EPA 7196 A 1992 = I controlli qualità applicabili risultano all'interno dei parametri statistici calcolati.

Riga (48) - Metodo: EPA 3550 C 2007 + EPA 8270 E 2018 = Per le analisi effettuate con il metodo EPA 8270, il recupero dei surrogati è risultato compreso tra 70% e 130% così come previsto dal metodo.

Riga (73), (76) - Metodo: EPA 5021A 2014 + EPA 8015 D 2003 = I controlli qualità applicabili risultano all'interno dei parametri statistici calcolati.

Informazioni aggiuntive - non oggetto di accreditamento ACCREDIA

Nota: Il produttore dichiara che lo stato fisico del rifiuto è: SOLIDO POLVERULENTO

VALUTAZIONI AI FINI DELLA CLASSIFICAZIONE AI SENSI DELLA DECISIONE UE 2014/955, DEL REGOLAMENTO UE 2014/1357 E DEL REGOLAMENTO UE 2017/997

I parametri da determinare sono stati scelti in base alla tipologia del rifiuto, alle indicazioni fornite dal produttore sulle materie prime utilizzate e sul ciclo produttivo e in base alla scheda di sicurezza dei prodotti:

Nome: AMMONIO SOLFATO
Produttore: CHIMITEX S.p.A.
Data revisione: 06/09/2016

Nome: BRETAX CL
Produttore: MOSAICO S.r.l.
Data revisione: 04/04/2018

Nome: SODIO SOLFATO ANIDRO
Produttore: Rainoldi Srl
Data revisione: 26/03/2018

Ai sensi della Decisione UE 2014/955, del Regolamento CEE/UE 1021/2019 e s.m.i., del Regolamento UE 2014/1357 e del Regolamento UE 2017/997, sulla base di quanto in essi riportato per le classi di pericolo HP1, HP2, HP3, HP4, HP5, HP6, HP7, HP8, HP9, HP10, HP11, HP12, HP13, HP14, HP15, il campione in esame risulta

RIFIUTO SPECIALE NON PERICOLOSO

Non presentando le caratteristiche contemplate nella Decisione UE 2014/955, nel Regolamento CEE/UE 1021/2019 e s.m.i., nel Regolamento UE 2014/1357 e nel Regolamento UE 2017/997

ANALISI SUL TAL QUALE: codici di pericolo così come riportati nella Tabella 3 allegato VI del Regolamento CE n. 1272/2008 e s.m.i. e classi di pericolo citate dal Regolamento UE n. 1357/2014

Informazioni fornite dal cliente

Descrizione: GESSO IN POLVERE - E.E.R.: 060314

Motivazioni del supplemento

Rapporto di prova riemesso dopo aggiunta di un commento

Responsabile prove chimiche
Dott.ssa Barbara Scantamburlo Chimico Ordine dei Chimici e dei Fisici - Provincia di Treviso Iscrizione n. A351
Num. certificato 21005078 emesso dall'ente certificatore ArubaPEC S.p.A. NG CA 3, ArubaPEC S.p.A., IT

- La riga contrassegnata da asterisco (*) indica che la prova non è accreditata da Accredia. - Se non diversamente specificato, l'incertezza è estesa ed è stata calcolata con un fattore di copertura $k=2$ corrispondente ad un livello di probabilità di circa il 95% o come intervallo di confidenza calcolato ad un livello di probabilità di circa il 95%. - RL: limite di quantificazione; "<x" o ">x" indicano rispettivamente un valore inferiore o superiore al campo di misura della prova. - Se non diversamente specificato, le sommatorie sono calcolate mediante il criterio del lower bound (L.B.). - In caso di alterazione del campione il laboratorio declina ogni responsabilità sui risultati che possono essere influenzati dallo scostamento nel caso il cliente chieda comunque l'esecuzione dell'analisi. - Nel caso il campionamento non sia effettuato dal personale del laboratorio i risultati ottenuti si considerano riferiti al campione così come ricevuto e il laboratorio declina la propria responsabilità sui risultati calcolati considerando i dati di campionamento forniti dal Cliente. Il nome e i recapiti del cliente sono sempre forniti dal cliente. - Il firmatario del rapporto di prova risponde anche per commenti/note riportate nel stesso. - R: recupero, i recuperi contrassegnati da cancelletto (#) non sono stati utilizzati nei calcoli. Il recupero è relativo alle fasi analitiche eseguite in laboratorio. - Qualora sia presente una specifica (limiti di legge o specifiche cliente) con cui sono stati confrontati i risultati analitici, i valori esposti in grassetto indicano un risultato fuori da tale specifica. - Se non diversamente specificato i giudizi di conformità/non conformità eventualmente riportati si riferiscono ai parametri analizzati e si basano sul confronto del valore con i valori di riferimento senza considerare l'intervallo di confidenza della misura.

The Brief Profile summarizes the non-confidential data on substances as it is held in the databases of the European Chemicals Agency (ECHA), including data provided by third parties. The Brief Profile is automatically generated; note that it does not currently distinguish between harmonised classification and minimum classification; information requirements under different legislative frameworks may therefore not be fully up to date or complete. For accuracy reasons, substance manufacturers and imports have the responsibility to consult official sources, e.g. the electronic edition of the Official Journal of the European Union.

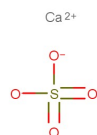
This Brief Profile is covered by the [ECHA Legal Notice](#).

Calcium sulfate

Brief Profile - Last updated: 23/07/2021

Substance Description

Substance identity



EC / List name:

IUPAC name: calcium sulfate

Substance names and other identifiers

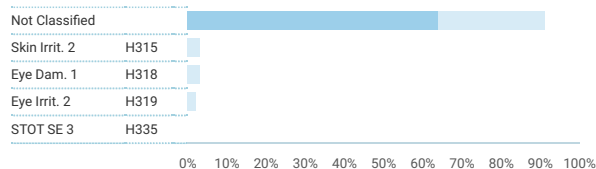
EC / List no.:	231-900-3
CAS no.:	7778-18-9
Index number:	
Molecular formula:	Ca.H2O4S
SMILES:	[Ca+].[O-]S(=O)(=O)
InChI:	InChI=1S/Ca.H2O4S/c;1-5(2,3)4/h;(H2,1,2,3,4)/q+2;/p-2
Type of substance:	Mono constituent substance
Origin:	Inorganic
Registered compositions:	170
Of which contain:	3 impurities relevant for classification 0 additives relevant for classification
Substance Listed:	EINECS (European INventory of Existing Commercial chemical Substances) List

Hazard classification & labelling

According to the notifications provided by companies to ECHA in REACH registrations no hazards have been classified.

According to the majority of notifications provided by companies to ECHA in CLP notifications no hazards have been classified.

[Breakdown of all 1912 C&L notifications submitted to ECHA](#)



✓ Harmonised Classification

■ REACH registration dossiers notifications

■ CLP notifications

Properties of concern

Regulatory context

Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH)

Registration

Pre-registration: Substance pre-registered under REACH.

Registration: This substance has 309 active [registrations](#) under REACH, 1 Joint Submission(s) and 0 Individual Submission(s).

Evaluation

Dossier Evaluation:

Substance Evaluation:

Authorisation

Candidate List:

Annex XIV (Authorisation List):

Restriction

Annex XVII (Restriction List):

Persistent Organic Pollutants Regulation (POPs)

List of substances subject to the POPs Regulation:

List of substances proposed as POPs:

Classification Labelling & Packaging (CLP)

Harmonised C&L:

Seveso Annex I:

Notified C&L: Classification & Labelling has been [notified by industry](#) to ECHA for this substance.

Biocidal Products Regulation (BPR)

Active Substance:

Biocidal Products:

Prior Informed Consent (PIC)

Annex I:

Annex V:

European Union Observatory for Nanomaterials (EUON)

EUON:

About this substance

General

This substance is registered under the REACH Regulation and is manufactured in and / or imported to the European Economic Area, at $\geq 10\,000\,000$ tonnes per annum.

This substance is used by consumers, in articles, by professional workers (widespread uses), in formulation or re-packing, at industrial sites and in manufacturing.

Consumer Uses

This substance is used in the following products: fertilisers, fillers, putties, plasters, modelling clay, coating products, finger paints, laboratory chemicals, adsorbents, cosmetics and personal care products, paper chemicals and dyes, welding & soldering products, adhesives and sealants, plant protection products, pH regulators and water treatment products, extraction agents, air care products, inks and toners, washing & cleaning products, water treatment chemicals, anti-freeze products, metals, biocides (e.g. disinfectants, pest control products), explosives, fuels, metal surface treatment products, non-metal-surface treatment products, heat transfer fluids, hydraulic fluids, leather treatment products, lubricants and greases, metal working fluids, perfumes and fragrances, photo-chemicals, polishes and waxes, polymers, semiconductors, textile treatment products and dyes, water softeners and pharmaceuticals. This substance has an industrial use resulting in manufacture of another substance (use of intermediates).

Release to the environment of this substance can occur from industrial use: manufacturing of the substance, formulation of mixtures, formulation in materials, in the production of articles, as an intermediate step in further manufacturing of another substance (use of intermediates), as processing aid, for thermoplastic manufacture, as processing aid, of substances in closed systems with minimal release, industrial abrasion processing with low release rate (e.g. cutting of textile, cutting, machining or grinding of metal), industrial abrasion processing with high release rate (e.g. sanding operations or paint stripping by shot-blasting) and in processing aids at industrial sites. Other release to the environment of this substance is likely to occur from: outdoor use, indoor use (e.g. machine wash liquids/detergents, automotive care products, paints and coating or adhesives, fragrances and air fresheners), indoor use in close systems with minimal release (e.g. cooling liquids in refrigerators, oil-based electric heaters), outdoor use in close systems with minimal release (e.g. hydraulic liquids in automotive suspension, lubricants in motor oil and break fluids), outdoor use in long-life materials with low release rate (e.g. metal, wooden and plastic construction and building materials), outdoor use in long-life materials with high release rate (e.g. tyres, treated wooden products, treated textile and fabric, brake pads in trucks or cars, sanding of buildings (bridges, facades) or vehicles (ships)), indoor use in long-life materials with low release rate (e.g. flooring, furniture, toys, construction materials, curtains, foot-wear, leather products, paper and cardboard products, electronic equipment) and indoor use in long-life materials with high release rate (e.g. release from fabrics, textiles during washing, removal of indoor paints).

Article service life

This substance is used in the following activities or processes at workplace: the low energy manipulation of substances bound in materials or articles, open transfer and processing with minerals/metals at elevated temperature, production of mixtures or articles by tableting, compression, extrusion or pelletisation, high energy work-up of substances bound in materials or articles (e.g. hot rolling/forming, grinding, mechanical cutting, drilling or sanding), potentially closed industrial processing with minerals/metals at elevated temperature (e.g. smelters, furnaces, refineries, coke ovens), hot work operations with metals (e.g. welding, soldering, gouging, brazing, flame cutting), hand mixing with intimate contact only with personal protective equipment available, handling of solid inorganic substances (e.g. ores and raw metal oxides, packaging/mixing/blending and weighing of metal powders), industrial spraying, closed, continuous processes with occasional controlled exposure, closed batch processing in synthesis or formulation, mixing in open batch processes, transfer of chemicals at non-dedicated facilities and transfer of substance into small containers.

Release to the environment of this substance can occur from industrial use: industrial abrasion processing with low release rate (e.g. cutting of textile, cutting, machining or grinding of metal), industrial abrasion processing with high release rate (e.g. sanding operations or paint stripping by shot-blasting), formulation of mixtures, in the production of articles, manufacturing of the substance, formulation in materials, as an intermediate step in further manufacturing of another substance (use of intermediates), as processing aid, for thermoplastic manufacture, as processing aid, of substances in closed systems with minimal release, in processing aids at industrial sites and of articles where the substances are not intended to be released and where the conditions of use do not promote release. Other release to the environment of this substance is likely to occur from: outdoor use, indoor use (e.g. machine wash liquids/detergents, automotive care products, paints and coating or adhesives, fragrances and air fresheners), indoor use in long-life materials with low release rate (e.g. flooring, furniture, toys, construction materials, curtains, foot-wear, leather products, paper and cardboard products, electronic equipment), outdoor use in long-life materials with low release rate (e.g. metal, wooden and plastic construction and building materials), outdoor use in long-life materials with high release rate (e.g. tyres, treated wooden products, treated textile and fabric, brake pads in trucks or cars, sanding of buildings (bridges, facades) or vehicles (ships)), indoor use in long-life materials with high release rate (e.g. release from fabrics, textiles during washing, removal of indoor paints), indoor use in close systems with minimal release (e.g. cooling liquids in refrigerators, oil-based electric heaters) and outdoor use in close systems with minimal release (e.g. hydraulic liquids in automotive suspension, lubricants in motor oil and break fluids).

This substance can be found in complex articles, with no release intended: vehicles, machinery, mechanical appliances and electrical/electronic products (e.g. computers, cameras, lamps, refrigerators, washing machines) and electrical batteries and accumulators. This substance can be found in products with material based on: stone, plaster, cement, glass or ceramic (e.g. dishes, pots/pans, food storage containers, construction and isolation material), paper (e.g. tissues, feminine hygiene products, nappies, books, magazines, wallpaper), rubber (e.g. tyres, shoes, toys), leather (e.g. gloves, shoes, purses, furniture), metal (e.g. cutlery, pots, toys, jewellery), wood (e.g. floors, furniture, toys), plastic (e.g. food packaging and storage, toys, mobile phones), fabrics, textiles and apparel (e.g. clothing, mattress, curtains or carpets, textile toys), stone, plaster, cement, glass and ceramic used for large surface area articles (e.g. construction and building materials for floor coverings, isolation articles), stone, plaster, cement, glass and ceramic used for furniture & furnishings, stone, plaster, cement, glass and ceramic used for articles with intense direct dermal contact during normal use (e.g. jewellery) and paper used for large surface area articles (e.g. construction and building materials for insulation panels, wall papers). This substance is intended to be released from scented: clothes, eraser, paper products, CDs and toys. This substance is intended to be released from: packaging material for metal parts (releasing grease/corrosion inhibitors).

Widespread uses by professional workers

This substance is used in the following products: fertilisers, fillers, putties, plasters, modelling clay, adsorbents, adhesives and sealants, coating products, laboratory chemicals, cosmetics and personal care products, welding & soldering products, pH regulators and water treatment products, plant protection products, paper chemicals and dyes, water treatment chemicals, non-metal-surface treatment products, inks and toners, polymers, washing & cleaning products, air care products, metals, biocides (e.g. disinfectants, pest control products), explosives, fuels, metal surface treatment products, heat transfer fluids, hydraulic fluids, leather treatment products, lubricants and greases, metal working fluids, perfumes and fragrances, pharmaceuticals, photo-chemicals, polishes and waxes, semiconductors, textile treatment products and dyes, water softeners, extraction agents, finger paints and anti-freeze products. This substance has an industrial use resulting in manufacture of another substance (use of intermediates).

This substance is used in the following areas: agriculture, forestry and fishing, mining, building & construction work, formulation of mixtures and/or re-packaging, health services, municipal supply (e.g. electricity, steam, gas, water) and sewage treatment, scientific research and development and printing and recorded media reproduction. This substance is used for the manufacture of: chemicals, mineral products (e.g. plasters, cement), pulp, paper and paper products, wood and wood products, food products, plastic products, machinery and vehicles, textile, leather or fur, rubber products, electrical, electronic and optical equipment, furniture, fabricated metal products and metals.

This substance is used in the following activities or processes at workplace: transfer of chemicals, mixing in open batch processes, closed, continuous processes with occasional controlled exposure, handling of solid inorganic substances (e.g. ores and raw metal oxides, packaging/mixing/blending and weighing of metal powders), transfer of substance into small containers, hand mixing with intimate contact only with personal protective equipment available, roller or brushing applications, laboratory work, batch processing in synthesis or formulation with opportunity for exposure, the low energy manipulation of substances bound in materials or articles, closed batch processing in synthesis or formulation, non-industrial spraying, open transfer and processing with minerals/metals at elevated temperature, treatment of articles by dipping and pouring, closed processes with no likelihood of exposure, industrial spraying, production of mixtures or articles by tableting, compression, extrusion or pelletisation, in materials as fuel sources, with limited exposure to unburned product to be expected, lubrication at high energy conditions and in partly open process, greasing at high energy conditions, hot work operations with metals (e.g. welding, soldering, gouging, brazing, flame cutting), high energy work-up of substances bound in materials or articles (e.g. hot rolling/forming, grinding, mechanical cutting, drilling or sanding), blowing agents in manufacture of foam, calendaring operations, heat / pressure transfer fluids in closed systems, potentially closed industrial processing with minerals/metals at elevated temperature (e.g. smelters, furnaces, refineries, coke ovens), production of metal powders (hot processes), production of metal powders (wet processes) and manual maintenance (cleaning and repair) of machinery.

Release to the environment of this substance can occur from industrial use: formulation of mixtures, in the production of articles, industrial abrasion processing with low release rate (e.g. cutting of textile, cutting, machining or grinding of metal), industrial abrasion processing with high release rate (e.g. sanding operations or paint stripping by shot-blasting), formulation in materials, manufacturing of the substance, in processing aids at industrial sites, as an intermediate step in further manufacturing of another substance (use of intermediates), as processing aid, for thermoplastic manufacture, as processing aid and of substances in closed systems with minimal release. Other release to the environment of this substance is likely to occur from: outdoor use, indoor use (e.g. machine wash liquids/detergents, automotive care products, paints and coating or adhesives, fragrances and air fresheners), indoor use in close systems with minimal release (e.g. cooling liquids in refrigerators, oil-based electric heaters), outdoor use in close systems with minimal release (e.g. hydraulic liquids in automotive suspension, lubricants in motor oil and break fluids), outdoor use in long-life materials with low release rate (e.g. metal, wooden and plastic construction and building materials), indoor use in long-life materials with low release rate (e.g. flooring, furniture, toys, construction materials, curtains, foot-wear, leather products, paper and cardboard products, electronic equipment), indoor use in long-life materials with high release rate (e.g. release from fabrics, textiles during washing, removal of indoor paints) and outdoor use in long-life materials with high release rate (e.g. tyres, treated wooden products, treated textile and fabric, brake pads in trucks or cars, sanding of buildings (bridges, facades) or vehicles (ships)).

Formulation or re-packaging

This substance is used in the following products: fertilisers, fillers, putties, plasters, modelling clay, adhesives and sealants, coating products, adsorbents, water treatment chemicals, welding & soldering products, laboratory chemicals, pH regulators and water treatment products, paper chemicals and dyes, cosmetics and personal care products, extraction agents, leather treatment products, textile treatment products and dyes, washing & cleaning products, air care products, metals, biocides (e.g. disinfectants, pest control products), explosives, fuels, metal surface treatment products, non-metal-surface treatment products, heat transfer fluids, hydraulic fluids, inks and toners, lubricants and greases, metal working fluids, plant protection products, perfumes and fragrances, pharmaceuticals, photo-chemicals, polishes and waxes, polymers, semiconductors, water softeners, finger paints and anti-freeze products. This substance has an industrial use resulting in manufacture of another substance (use of intermediates).

This substance is used in the following activities or processes at workplace: transfer of chemicals, mixing in open batch processes, the low energy manipulation of substances bound in materials or articles, handling of solid inorganic substances (e.g. ores and raw metal oxides, packaging/mixing/blending and weighing of metal powders), laboratory work, closed batch processing in synthesis or formulation, roller or brushing applications, transfer of substance into small containers, closed processes with no likelihood of exposure, closed, continuous processes with occasional controlled exposure, batch processing in synthesis or formulation with opportunity for exposure, hand mixing with intimate contact only with personal protective equipment available, industrial spraying, open transfer and processing with minerals/metals at elevated temperature, production of mixtures or articles by tableting, compression, extrusion or pelletisation, non-industrial spraying, high energy work-up of substances bound in materials or articles (e.g. hot rolling/forming, grinding, mechanical cutting, drilling or sanding), treatment of articles by dipping and pouring, potentially closed industrial processing with minerals/metals at elevated temperature (e.g. smelters, furnaces, refineries, coke ovens), hot work operations with metals (e.g. welding, soldering, gouging, brazing, flame cutting), in materials as fuel sources, with limited exposure to unburned product to be expected, lubrication at high energy conditions and in partly open process, greasing at high energy conditions, production of metal powders (hot processes), production of metal powders (wet processes), blowing agents in manufacture of foam, heat / pressure transfer fluids in closed systems, calendaring operations and manual maintenance (cleaning and repair) of machinery.

Release to the environment of this substance can occur from industrial use: formulation of mixtures, in materials, as an intermediate step in further manufacturing of another substance (use of intermediates), manufacturing of the substance, in processing aids at industrial sites, in the production of articles, as processing aid, for thermoplastic manufacture, as processing aid, of substances in closed systems with minimal release, industrial abrasion processing with low release rate (e.g. cutting of textile, cutting, machining or grinding of metal) and industrial abrasion processing with high release rate (e.g. sanding operations or paint stripping by shot-blasting). Other release to the environment of this substance is likely to occur from: indoor use (e.g. machine wash liquids/detergents, automotive care products, paints and coating or adhesives, fragrances and air fresheners), outdoor use, outdoor use in long-life materials with low release rate (e.g. metal, wooden and plastic construction and building materials), indoor use in long-life materials with low release rate (e.g. flooring, furniture, toys, construction materials, curtains, foot-wear, leather products, paper and cardboard products, electronic equipment), outdoor use in long-life materials with high release rate (e.g. tyres, treated wooden products, treated textile and fabric, brake pads in trucks or cars, sanding of buildings (bridges, facades) or vehicles (ships)), indoor use in long-life materials with high release rate (e.g. release from fabrics, textiles during washing, removal of indoor paints), indoor use in close systems with minimal release (e.g. cooling liquids in refrigerators, oil-based electric heaters) and outdoor use in close systems with minimal release (e.g. hydraulic liquids in automotive suspension, lubricants in motor oil and break fluids).

Uses at industrial sites

This substance is used in the following products: adsorbents, adhesives and sealants, pH regulators and water treatment products, fertilisers, fillers, putties, plasters, modelling clay, coating products, water treatment chemicals, welding & soldering products, paper chemicals and dyes, laboratory chemicals, non-metal-surface treatment products, leather treatment products, polymers, textile treatment products and dyes, washing & cleaning products, cosmetics and personal care products, air care products, metals, biocides (e.g. disinfectants, pest control products), explosives, fuels, metal surface treatment products, heat transfer fluids, hydraulic fluids, inks and toners, lubricants and greases, metal working fluids, plant protection products, perfumes and fragrances, pharmaceuticals, photo-chemicals, polishes and waxes, semiconductors, water softeners, extraction agents, finger paints and anti-freeze products. This substance has an industrial use resulting in manufacture of another substance (use of intermediates).

This substance is used in the following areas: mining, formulation of mixtures and/or re-packaging, building & construction work, agriculture, forestry and fishing, printing and recorded media reproduction, health services, municipal supply (e.g. electricity, steam, gas, water) and sewage treatment and scientific research and development. This substance is used for the manufacture of: chemicals, mineral products (e.g. plasters, cement), pulp, paper and paper products, food products, wood and wood products, rubber products, plastic products, machinery and vehicles, metals, textile, leather or fur, fabricated metal products, electrical, electronic and optical equipment and furniture.

This substance is used in the following activities or processes at workplace: transfer of chemicals, closed, continuous processes with occasional controlled exposure, closed processes with no likelihood of exposure, closed batch processing in synthesis or formulation, mixing in open batch processes, batch processing in synthesis or formulation with opportunity for exposure, laboratory work, handling of solid inorganic substances (e.g. ores and raw metal oxides, packaging/mixing/blending and weighing of metal powders), roller or brushing applications, industrial spraying, open transfer and processing with minerals/metals at elevated temperature, the low energy manipulation of substances bound in materials or articles, transfer of substance into small containers, production of mixtures or articles by tableting, compression, extrusion or pelletisation, potentially closed industrial processing with minerals/metals at elevated temperature (e.g. smelters, furnaces, refineries, coke ovens), hand mixing with intimate contact only with personal protective equipment available, treatment of articles by dipping and pouring, greasing at high energy conditions, high energy work-up of substances bound in materials or articles (e.g. hot rolling/forming, grinding, mechanical cutting, drilling or sanding), hot work operations with metals (e.g. welding, soldering, gouging, brazing, flame cutting), in materials as fuel sources, with limited exposure to unburned product to be expected, lubrication at high energy conditions and in partly open process, production of metal powders (hot processes), production of metal powders (wet processes), blowing agents in manufacture of foam, non-industrial spraying, heat / pressure transfer fluids in closed systems, calendaring operations and manual maintenance (cleaning and repair) of machinery.

Release to the environment of this substance can occur from industrial use: in the production of articles, as an intermediate step in further manufacturing of another substance (use of intermediates), of substances in closed systems with minimal release, in processing aids at industrial sites, formulation of mixtures, as processing aid, as processing aid, for thermoplastic manufacture, manufacturing of the substance, formulation in materials, industrial abrasion processing with low release rate (e.g. cutting of textile, cutting, machining or grinding of metal) and industrial abrasion processing with high release rate (e.g. sanding operations or paint stripping by shot-blasting). Other release to the environment of this substance is likely to occur from: indoor use (e.g. machine wash liquids/detergents, automotive care products, paints and coating or adhesives, fragrances and air fresheners), outdoor use, outdoor use in long-life materials with low release rate (e.g. metal, wooden and plastic construction and building materials), indoor use in long-life materials with low release rate (e.g. flooring, furniture, toys, construction materials, curtains, foot-wear, leather products, paper and cardboard products, electronic equipment), outdoor use in long-life materials with high release rate (e.g. tyres, treated wooden products, treated textile and fabric, brake pads in trucks or cars, sanding of buildings (bridges, facades) or vehicles (ships)), indoor use in long-life materials with high release rate (e.g. release from fabrics, textiles during washing, removal of indoor paints), indoor use in close systems with minimal release (e.g. cooling liquids in refrigerators, oil-based electric heaters) and outdoor use in close systems with minimal release (e.g. hydraulic liquids in automotive suspension, lubricants in motor oil and break fluids).

Manufacture

This substance is used in the following activities or processes at workplace: transfer of chemicals, closed, continuous processes with occasional controlled exposure, batch processing in synthesis or formulation with opportunity for exposure, closed batch processing in synthesis or formulation, closed processes with no likelihood of exposure, handling of solid inorganic substances (e.g. ores and raw metal oxides, packaging/mixing/blending and weighing of metal powders), laboratory work, open transfer and processing with minerals/metals at elevated temperature, mixing in open batch processes, the low energy manipulation of substances bound in materials or articles, industrial spraying, roller or brushing applications, transfer of substance into small containers, hand mixing with intimate contact only with personal protective equipment available, production of mixtures or articles by tableting, compression, extrusion or pelletisation, potentially closed industrial processing with minerals/metals at elevated temperature (e.g. smelters, furnaces, refineries, coke ovens), treatment of articles by dipping and pouring, heat / pressure transfer fluids in closed systems, high energy work-up of substances bound in materials or articles (e.g. hot rolling/forming, grinding, mechanical cutting, drilling or sanding), hot work operations with metals (e.g. welding, soldering, gouging, brazing, flame cutting), production of metal powders (hot processes), in materials as fuel sources, with limited exposure to unburned product to be expected, lubrication at high energy conditions and in partly open process, greasing at high energy conditions, production of metal powders (wet processes), non-industrial spraying, blowing agents in manufacture of foam, calendaring operations and manual maintenance (cleaning and repair) of machinery.

Release to the environment of this substance can occur from industrial use: manufacturing of the substance, as an intermediate step in further manufacturing of another substance (use of intermediates), formulation of mixtures, formulation in materials, in processing aids at industrial sites, in the production of articles, as processing aid, for thermoplastic manufacture, as processing aid, of substances in closed systems with minimal release, industrial abrasion processing with low release rate (e.g. cutting of textile, cutting, machining or grinding of metal) and industrial abrasion processing with high release rate (e.g. sanding operations or paint stripping by shot-blasting). Other release to the environment of this substance is likely to occur from: indoor use (e.g. machine wash liquids/detergents, automotive care products, paints and coating or adhesives, fragrances and air fresheners), outdoor use, indoor use in close systems with minimal release (e.g. cooling liquids in refrigerators, oil-based electric heaters), outdoor use in close systems with minimal release (e.g. hydraulic liquids in automotive suspension, lubricants in motor oil and break fluids), outdoor use in long-life materials with low release rate (e.g. metal, wooden and plastic construction and building materials), outdoor use in long-life materials with high release rate (e.g. tyres, treated wooden products, treated textile and fabric, brake pads in trucks or cars, sanding of buildings (bridges, facades) or vehicles (ships)), indoor use in long-life materials with low release rate (e.g. flooring, furniture, toys, construction materials, curtains, foot-wear, leather products, paper and cardboard products, electronic equipment) and indoor use in long-life materials with high release rate (e.g. release from fabrics, textiles during washing, removal of indoor paints).

Precautionary Measures and safe use

Precautions for using this substance have been recommended by its registrants under REACH, as follows:

Prevention statements

When handling this substance: avoid release to the environment; wear protective gloves and/or clothing, and eye and/or face protection as specified by manufacturer/supplier.

Response statements

In case of incident: Immediately call a poison center or doctor/physician. If in eyes: rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. If on skin: wash with soap and water.

Guidance on the safe use of the substance provided by manufacturers and importers of this substance.

Registrants/suppliers**Active**

- A2A Energiefuture S.p.A., Corso di Porta Vittoria, 4 20122 Milano Italy
- Aalborg Portland A/S, Rørdalsvej 44 9220 Aalborg Denmark
- Acros Organics bv, Janssen Pharmaceuticaalaan 3a B-2440 Geel Belgium
- Afval Energie Bedrijf, Australiehavenweg 21 1045 BA Amsterdam Netherlands
- AGRI.BIO.FERT.CORRETTIVI srl, Via A. Rizzo, 197 45010 Villadose Rovigo Italy
- AGROSISTEMI, Via del Capitolo, 54 29122 Piacenza Italy
- Alan srl, Località Ca' Bianca 27030 Zinasco Pavia Italy
- ALBEMARLE CATALYSTS COMPANY B.V., Nieuwendammerkade 1-3 PO Box 37650 1030 BE Amsterdam Netherlands
- Aliphos Rotterdam B.V., Zevenmanshaven Oost 139 3133 CA Vlaardingen Netherlands
- Alkeemia S.p.A., Via Flavio Vegezio, 12 20149 Milano Italy
- ARKEMA FRANCE, 420 rue d'Estienne d'Orves 92700 COLOMBES France
- ATLANTIC COPPER S.L.U., Avenida Francisco Montenegro s/n 21001 Huelva Huelva Spain
- Aurubis Bulgaria, Industrial Zone 2070 Pirdop Bulgaria
- B-Lands Consulting (811253-4), World Trade Center 5 Place Robert Schuman - BP 1516 38025 Grenoble France France
- B-Lands Consulting (811496-1), World Trade Center, 5 Place Robert Schuman, BP 1516 38025 Grenoble France France
- Baikowski, 1046 route de chaumontet -BP501 74330 Poisy France
- Baumit GmbH, Reckenberg 12 87541 Bad Hindelang Germany
- BENS consultnig d.o.o., Bakovniška 7 1241 Kamnik Slovenia
- Berzelius Metall GmbH, Emser Strasse 11 56338 Braubach Germany
- BGB Giovanni Bozzetto, S.A., Pol.Industrial de Lantaron 0123 Salcedo Alava Spain
- Borealis Agrolinz Melamine GmbH, St. Peter-Str. 25 4021 Linz Austria
- BorsodChem MCHZ, Chemická 2039/1 709 00 Ostrava Czech Republic
- Bozzetto Polska Sp. zo.o., Ul. Pawliczka 1 41-800 Zabrze Poland
- Brede Srl, via curti, 887 24059 Urgnano Lombardia Italy
- CAME srl, Via Lepetit 40 20020 Lainate MI Italy
- CASEA GmbH, Pontelstraße 3 99755 Ellrich Germany
- Casimiro Hernández e Hijos, "La Maruxiña" S.A., Avenida de Castilla la Mancha, número 6 45240 Alameda de la Sagra Toledo Spain
- CATALYST RECOVERY EUROPE S.A., 420, Route de Longwy 4832 Rodange Luxembourg
- Caviro Extra SpA con SU, Via Convertite 8 48018 Faenza Ravenna Italy
- Cementa AB, Box 47210 100 74 Stockholm Sweden
- CHEMICAL INSPECTION & REGULATION SERVICE LIMITED (JIANGXI FENGZHU NEW MATEIRALS TECHNOLOGY CO., LTD.), Regus Harcourt Centre D02 HW77 Dublin Ireland
- Chemische Fabrik Budenheim KG, Rheinstrasse 27 55257 Budenheim RLP Germany
- CIECH Soda Polska S.A., Fabryczna 4 88-101 Inowroclaw Województwo Kujawsko-Pomorskie Poland
- Cinkarna Celje, Kidričeva 26 3000 Celje Slovenia
- Clariant Produkte (Deutschland) GmbH, Am Unisys-Park 1 65843 Sulzbach am Taunus Germany
- CM European Power Slovakia, s.r.o., Vlíče hrdlo 1 82412 Bratislava Slovakia
- COMPO Expert GmbH, Krögerweg 10 48155 Münster NRW Germany
- CONSORZIO S.G.S. S.p.A., Via Nuova Francesca, 23 56029 S. Croce sull'Arno (PI) Italy Italy
- ContourGlobal Maritsa East 3 AD, 48 Sitnyakovo Blvd, 9 fl. 1505 Sofia Sofia Bulgaria
- Crystal BOHEMIA, a. s., Jiráskova 223 29001 Poděbrady Czech Republic
- CURRENTA GmbH & Co. OHG, CHEMPARK, Building Q 18 D-51368 Leverkusen Germany
- DEKRA Assurance Services GmbH OR06, Handwerkstr. 15 70565 Stuttgart Germany
- DERIVADOS DEL FLUOR, S.A.U., Ontón 39706 Castro Urdiales Cantabria Spain
- Devnya Cement AD, Industrial zone 9160 Devnya Bulgaria
- Distillerie Mazzari Spa, Via giardino, 6 48020 S.Agata sul Santeramo (RA) Italy
- Dolina Nidy Sp. z o. o., Leszcze 15 28-400 Pińczów Świętokrzyskie Poland
- DSM Nutritional Products GmbH-OR18, Emil-Barell-Str. 3 79639 Grenzach-Wyhlen Germany
- EDF Energia Spółka Akcyjna, Złota 59 00-120 Warszawa Poland
- EDF S.A., 22 avenue de Wagram 75008 Paris France
- EDP ESPAÑA, S.A.U., Plaza del Fresno 2 33007 Oviedo Asturias Spain
- EDP-Gestão da Produção de Energia, S.A., Av. 24 de Julho, 12 1249-300 Lisboa Portugal
- eins energie in sachsen GmbH & Co. KG, Augustusburger Straße 1 09111 Chemnitz Germany
- Elektrarny Opatovice, a.s., Opatovice nad Labem 532 13 Pardubice 2 Czech Republic
- Elektrownia Pątnów II Sp. z o.o., Kazimierska 45 62-510 Konin Poland
- Elektrárna Chvaletice a.s., K Elektrárně 227 55312 Chvaletice Czech Republic
- Elektrárna Dětmarovice, a.s., Dětmarovice 1202 73571 Dětmarovice Czech Republic
- Elektrárna Počeradý, a.s., Duhová 2/1444 140 53 Praha 4 Czech Republic
- Elektrárna Tisová, a. s., Brezova 35601 Tisova 2 Czech Republic
- ENBW Energie Baden-Württemberg AG, Durlacher Allee 93 76131 Karlsruhe Germany
- ENDESA GENERACION S.A., Avenida de la Borbolla, 5 41004 Sevilla Spain
- Enea Elektrownia Połaniec S.A., Zawada 26 28-230 Połaniec Świętokrzyskie Poland
- ENEA WYTWARZANIE SP. Z O.O., - 26-900 Swierze Górne mazowieckie Poland
- Enel Produzione SpA, Viale Regina Margherita 125 00198 Rome Italy
- ENERGA Elektrownie Ostrołęka Spółka Akcyjna, Elektryczna 5 07-401 Ostrołęka Poland
- Energotrans a.s., Partyzánská 1/7 170 00 Praha Czech Republic
- ENGIE Energie Nederland N.V., Missouriweg 69 3199 LB Rotterdam Netherlands
- EON-Benelux, Capelseweg 400 3068AX Rotterdam Netherlands
- ESAB CZ, s.r.o., člen koncernu, Smetanovo nábřeží 334 51754 Vamberk Czech Republic
- ESCAYCOS, S.L. Ctra. Badajoz-Granada, Km 365 23660 Alcaudete Jaén Spain
- ESCAYOLAS MARIN, S.L.U., CTRA. MADRID-VALENCIA, KM 92.400 16420 VILLARRUBIO CUENCA Spain
- ESYDEBRO S.L., ATALAYA S/N 50786 GELSA ZARAGOZA Spain
- Etex Building Performance GmbH, Scheifenkamp 16 40878 Ratingen Germany
- ETEX BUILDING PERFORMANCE S.A., Vulturilor 98 Etaj 5 RO-030857 Bucharest Sector 3 Romania

- Etex Building Performance S.p.A., Via Giacomo Leopardi 2 20123 MILANO Italy
- Etex France Building Performance, 500 rue Marcel Demouque 84915 AVIGNON France
- EuroChem Antwerpen NV, Haven 725, Scheldelaan 600 2040 Antwerp Belgium
- Evergreen Italia S.r.l., Strada Vicinale della Bellaria s.n 27020 Tromello Italy
- Evonik Operations GmbH, Rellinghauser Straße 1-11 45128 Essen Germany
- ExponentOR731, Block 1, Blanchardstown Corporate Park Ballycoolen Road Blanchardstown D15 AKK1 Dublin Ireland
- FASSA SRL, VIA LAZZARIS 3 31027 SPRESIANO TV Italy
- Fermacell B.V., Loonse Waard 20 NL 6606 KG Niftrik Netherlands
- Ferroenergy s.r.o., Vstupny Areal U. S. Steel 044 54 Kosice Slovakia
- FIBRAN S.P.A., Via Domenico Fiasella 5/11 16121 Genova Italy
- Fiume Santo S.P.A., località Cabu Aspru 07100 Sassari Italy
- Fluorchemie Dohna GmbH, Werksweg 2 92551 Stulln Sachsen Germany
- Fluorchemie Stulln GmbH, Werksweg 2 92551 Stulln Bayern Germany
- Fluorsid ICIB s.r.l., Via Flavio Vegezio, 12 20149 Milano Italy
- Fluorsid Noralf AS, Eitrheimsneset 1 N-5750 Odda Norway
- Fluorsid SpA, 2° strada Macchiareddu 09032 Assemini (CA) Sardinia Italy
- FMC Foret S.A., Avenida Diagonal 530-532, 3ª planta 08006 Barcelona Spain
- Fortum Power and Heat Oy, P.O.Box 1 FI-00048 FORTUM Finland
- Fosfa a.s., Hraniční 268 69141 Břeclav Czech Republic
- Frisia Zout b.v., NL-8861 Harlingen, Lange Lijnbaan 15 8861 NW Harlingen Netherlands
- Galactic, Place d'Escanaffes 23 7760 Escanaffes Belgium
- Gemeinschaftskraftwerk Bergkamen A OHG, Rüttenscheider Straße 1-3 45128 Essen Germany
- Gemeinschaftskraftwerk Kiel GmbH, Hasselfelde 40 24149 Kiel Germany
- Gemeinschaftskraftwerk Veltheim GmbH, Möllberger Straße 387 32457 Porta Westfalica Germany
- Gessi del Vallone S.r.l., Località Vallone I-53031 Casole d'Elsa Italy
- Gessi Roccastrada srl, Località Tamburino snc I - 58036 Roccastrada (Grosseto) Italy
- Giovanni Bozzetto SpA, Via Provinciale, 12 24040 Filago Lombardia Italy
- GIOVANNI RANDI SPA, Via Spallanzani 7 48018 Faenza Emilia Romagna Italy
- Gipswerk Embsen GmbH & Co. Baustoffproduktion KG, Am Alten Werk 1 21409 Embsen Germany
- Gipswerk Schretter & Cie Gesellschaft m. b. H., Bahnhofstrasse 27 6682 Vils Tirol Austria
- Grosskraftwerk Mannheim AG, Marguerrestraße 1 68199 Mannheim Germany
- Grupa Azoty Zakłady Chemiczne "POLICE" Spolka Akcyjna, Kuznicka 1 72-010 Police Poland
- GYPSTREND s.r.o., Stiborska 790 74727 Koberice Czech Republic
- Gyvlon BV, Centralweg16 Postbus 138 NL-4930 AC Geertruidenberg Netherlands
- H&R ChemPharm GmbH, Neuenkirchener Strasse 8 48499 Salzbergen Germany
- H.C. Starck Tungsten GmbH, Landsberger Str. 98 80339 München Germany
- Hamburger Stadtentwässerung Anstalt öffentlichen Rechts, Billhomer Deich 2 20539 Hamburg Germany
- Hasit Trockenmörtel GmbH, Landshuterstrasse 30 85356 Freising Germany
- Hilliges Gipswerk GmbH & Co.KG, Hüttenweg 1 D-37520 Osterode am Harz Niedersachsen Germany
- HNOS. RUIZ DORANTES S.L., CARRETERA LOS TOLLOS, KM.3 41740 LEBRIJA SEVILLA Spain
- Hofer A/S, Oerestads Boulevard 35 DK 2300 Kbh S Copenhagen Denmark
- HOLCIM (Süddeutschland) GmbH, Dormettinger Strasse 23 72359 Dotternhausen Germany
- Honeywell Specialty Chemicals Seelze GmbH, Wunstorfer Str. 40 30926 Seelze Deutschland Germany
- Hundisburger Baustoffmanufaktur, Inh. Foerderverein Technisches Denkmal Ziegelei Hundisburg e.V., Jacob-Bührer-Str.2 OT Hundisburg 39343 Haldensleben Sachsen-Anhalt Germany
- Huta Cynku Miasteczko Śląskie S.A., Hutnicza 17 42-610 Miasteczko Śląskie Poland
- Industria Chimica Valenzana S.p.A., Via Desman, 428 35010 Borgoricco Italy
- Industrial Solutions Bulgaria Ltd., " " " No 49 " " 1404 Sofia Bulgaria
- IRISH GYPSUM LTD, KINGSCOURT 000000 CO.CAVAN Ireland
- James Hardie Europe GmbH, Bennings Platz 1 40474 Düsseldorf Germany
- Jungbunzlauer Austria AG, Factory Pernhofen 2064 Wulzeshofen Austria
- KandCo, Route d'Avignon Quartier du grand Grès - BP20101 84303 CAVAILLON Cedex France
- Kandelium Barium Strontium GmbH & Co.KG, HANS-BOECKLER-ALLEE 20 30173 HANNOVER Germany
- KCM S.A., Assenovgradsko shosse 4009 Plovdiv Bulgaria
- KIK Textilien und Non-Food GmbH, Siemensstrasse 21 59199 Boenen Germany
- Knauf (UK) GmbH, Am Bahnhof 7 97346 Iphofen Germany
- Knauf A/S, Antoinettevej 3 2500 Valby Denmark
- Knauf B.V. Niederlande, Mesonweg 8-12 3542 AL Utrecht Netherlands
- Knauf Bełchatów Sp. z o.o., ul. Gipsowa 3 97427 Rogowice Gmina Kleszczów Poland
- Knauf Bulgaria EOOD Sofia, Angelov-Vrach-Strasse 27 1618 Sofia Bulgaria
- Knauf Danogips GmbH Schweden Filial, - 29680 Åhus Sweden
- Knauf Deutsche Gipswerke KG, Am Bahnhof 7 97346 Iphofen Germany
- Knauf di Knauf S.R.L. S.A.S., VIA LIVORNESE, 20 56040 Castellina Marittima Pisa Italy
- Knauf Gips KG, Am Bahnhof 7 97346 Iphofen Germany
- Knauf GmbH Sucursal en España, Avda. Manóteras 10, Edificio C 28050 Madrid Spain
- Knauf GmbH Weissenbach, Knaufstrasse 1 8940 Weissenbach / Liezen Austria
- KNAUF GYPSOPIA A.B.E.E., Evripidou, 10 17674 Kallithea/Athen Greece
- Knauf Integral KG, Am Bahnhof 16 74589 Satteldorf Germany
- Knauf Jaworzno III Sp. z o.o., ul. Promienna 51 43603 Jaworzno Schlesien Poland
- Knauf Oy, Lars Sonckin kaari 14, PL 18 02601 Espoo Finland
- Knauf Plâtres et Cie. SCS, zone industrielle du souvoy saint souplet 77234 domartin en goele cedex France
- Knauf Praha spol. s. r. o., Mladoboleslavská 949 19700 Praha 9 - Kbely Praha Czech Republic
- Knauf SIA, Daugavasstrasse 4 2118 Riga Gemeinde Stopini, Bezirk Riga Latvia
- KNG Kraftwerks- und Netzgesellschaft mbH, Am Kuehlturm 1 18147 Rostock Germany
- Knoell NL-OR-S35, Agro Business Park 75 6708 PV Wageningen Netherlands
- Knoell NL_OR_063, Agro Business Park 75 6708 PV Wageningen Netherlands
- Kraftwerk Mehrum GmbH, Triftstrasse 25 31249 Hohenhameln Germany
- Kraftwerk Voerde OHG der STEAG GmbH und RWE Power AG, Rüttenscheider Straße 1 - 3 45128 Essen North Rhine-Westfalia Germany
- KRONOS EUROPE S.A./N.V., Langerbruggekaai 10 9000 Gent Belgium
- KTR Europe GmbH, Mergenthalerallee 77 65760 Eschborn Germany
- Lafarge Cement, Kolodvorska 5 1420 Trbovlje Slovenia
- Lafarge Zementwerke GmbH, Trabrennstraße 2A 1020 Vienna Austria
- lages spa lavorazione gessi speciali, via molino 26 25055 Pisogne Italy
- Lanxess Deutschland GmbH, Kennedyplatz 1 50569 Köln Germany
- Lausitz Energie Kraftwerke AG, Vom-Stein-Straße 39 03050 Cottbus Germany
- Lenzing AG, Werkstraße 4860 Lenzing Austria
- Lifosa, Juodkiskio 50 LT-57502 Kedainiai Lithuania
- Lifosa-5, Juodkiskio 50 LT-57502 Kedainiai Lithuania
- Lifosa-6, Juodkiskio 50 LT-57502 Kedainiai Lithuania
- LUVENA S.A., Romana Maya 1 62-030 Lubon Wielkopolskie Poland
- Mark-E Aktiengesellschaft, Körnerstr. 40 58095 Hagen Germany
- Master Builders Solutions Italia S.P.A., Via Vicinale delle Corti 21 attn. EHSQ Department 31100 Treviso (TV) Italy
- maxit Baustoffwerke GmbH, Brandensteiner Weg 1 07387 Kröpla Germany
- Merck KGaA, Frankfurter Strasse 250 64293 Darmstadt Germany
- MIBRAG Mitteldutsche Braunkohlengesellschaft mbH, Glück-Auf-Straße 1 06711 Zeitz Sachsen-Anhalt Germany
- Minera Alcarreña S.L., Carretera de Fuencemillan a Espinosa de Henares Km. 3,7 Fabrica de escayolas 19239 Fuencemillan Spain
- MINERALS I DERIVATS, S.A., Av. Verdaguer, 3 43720 L'Arboç Tarragona Spain
- Moldan Baustoffe GmbH & Co. KG, Kellau 75 5431 Kuchl Salzburg Austria
- MPI Reciklaza d.o.o., Žerjav 79 2393 Črna na Koroškem Slovenia
- MVB Müllverwertung Borsigstraße GmbH, Borsigstraße 6 22113 Hamburg Germany
- MVR Müllverwertung Rugenberger Damm GmbH & Co. KG, Rugenberger Damm 1 21129 Hamburg Germany
- MVV Umwelt Asset GmbH, Otto-Hahn-Str. 1 68169 Mannheim Germany
- Mátrai Power Plant Closed Company Limited by Shares, Eromu ut 11 3271 Visonta Hungary
- N & B Knauf & Cie S.C.S., parc industriel 4480 liege Belgium
- Nordjylandsværket A/S, Nefovej 50 9310 Vodskov Denmark
- Norgips Norge AS, PB 655 Strømsø 3003 Drammen Norway
- Nowe Jaworzno Grupa Tauron sp. z o.o., Dobrej Energii 11 43-603 Jaworzno Poland
- Nuon Power Generation B.V., Petroleumhavenweg 1 1041AB Amsterdam Netherlands
- NUTRIEN EUROPE S.A., Avenue Louise 326 (bte36) B - 1050 BRUXELLES Belgium
- Nyrstar Budel BV, Hoofdstraat 1 6024 AA Budel-Dorplein Netherlands
- Oligo SA, Poligono Industrial Nuevo Puerto Calle A s/n 21810 Palos de la Frontera (Huelva) Spain
- ONYX Kraftwerk Farge GmbH & Co. KGaA, Wilhelmshavener Straße 6 28777 Bremen Germany
- ONYX Kraftwerk Wilhelmshaven GmbH & Co. KG, Niedersachsendamm 10 26386 Wilhelmshaven Niedersachsen Germany
- ONYX Kraftwerk Zolling GmbH & Co. KGaA, Leiniger Strasse 1 85406 Zolling Germany
- PCC Rokita SA, Sienkiewicza 4 56-120 Brzeg Dolny Poland
- Petrokemija d.d. Kutina, Aleja Vukovar 4 HR-44320 Kutina Croatia
- PGE Elektrownia Opole S.A., Brzezkie k.Opola 46-021 Brzezkie k. Opola Poland
- PGE Energia Ciepła S.A., ul. Złota 59 00-120 Warszawa Poland
- PGE Górnictwo i Energetyka Konwencjonalna S.A., Węglowa 5 97-400 Bełchatów Poland
- PGNiG TFRMIKA SA, Modlińska 15 03-216 Warszawa Poland

- PHOSINT LIMITED, 21 Vasili Michailidi 3026 Limassol Cyprus
- Piotrowice Sp. z o.o., Piotrowice 106 27-630 Zawichost Poland
- PLACOPLATRE, Tour Saint-Gobain 12 Place de l'Iris 92400 Courbevoie France
- PLADUR GYPSUM, S.A.U., Ctra. Andalucía Km 30.2 28343 Valdemoro (Madrid) Spain
- Plzeňská teplárenská, a.s., Doubravská 2578/1 304 10 Plzeň Czech Republic
- Polski Koncern Naftowy ORLEN SA, ul. Chemików 7 09-411 Plock Poland
- Portovesme s.r.l., S.P. n. 2 Carbonia-Portoscuso km 16.5 09010 Portoscuso Carbonia-Iglesias Italy
- PRAYON S.A., 144, rue Joseph Wauters 4480 ENGIS Belgium
- Precheza a.s. Pířerov, Nábřezí Dr. E. Beneše 24 751 62 Pířerov Czech Republic
- Profifitra B.V., Meerpaalweg 4 1332 BB ALMERE Netherlands
- REACH GLOBAL SERVICES S.A., Rond Point Schuman, 6 B-1040 Brussels Belgium
- REACH GLOBAL SERVICES S.A., Rond Point Schuman, 6 Box 5 B-1040 Brussels Belgium
- REACH24H CONSULTING GROUP, Paramount Court, Corrig Road, Sandyford Dublin18 Dublin Ireland
- REMONDIS Production GmbH, Brunnenstr. 138 44536 Lünen NRW Germany
- Reno De Medici Arnsberg GmbH, Hellefelder Straße 51 59821 Arnsberg Germany
- RKB Raffinerie-Kraftwerks-Betriebs GmbH, Rüttenscheider Straße 1-3 45128 Essen North Rhine-Westfalia Germany
- Rocal Boxberg GmbH & Co. Anhydritproduktion KG, Im Kraftwerk 02943 Boxberg Germany
- Romonta GmbH, OT Amsdorf, Chausseestr. 1 D-06317 Seegebiet Mansfelder Land Germany
- Rosier Nederland B.V., Westkade 38a 4551 BV Sas van Gent Netherlands
- ROSIER S.A., 11a, Route de Grandmetz 7911 Moustier Hainaut Belgium
- RWE Eemshaven Holding II B.V., Amerweg 1 4931NC Geertruidenberg Netherlands
- RWE Generation NL B.V., Amerweg 1 4931 NC Geertruidenberg Netherlands
- RWE Generation SE, Huysenallee 2 45128 Essen Germany
- RWE Power AG, Huysenallee 2 45128 Essen Germany
- S.A. Anhybel N.V., Ambachtenlaan 50 B 3300 Tienen Belgium
- S.A. CITRIQUE BELGE N.V., Pastorijsstraat 249 3300 TIENEN Belgium
- SAINT GOBAIN CONSTRUCTION PRODUCTS ROMANIA SRL, 11-15 TIPOGRAFILOR, S-PARK,CORP B3-B4, SECTOR 1 CENTRAL BUSINESS PARK 013714 BUCURESTI Romania
- SAINT-GOBAIN CONSTRUCTION PRODUCTS POLSKA SP Z.O.O., Okreżna 16 44-100 GLIWICE Poland
- SAINT-GOBAIN FORMULA GMBH, KUTZHUETTE 37445 WALKENRIED Germany
- SAINT-GOBAIN HELLAS ABBE, 5 KLISSOURAS PO BOX 52096 144-10 METAMORFOSSI-ATTICA Greece
- Saint-Gobain Placo Iberica, SA (1), 77 PASEO DE LA CASTELLANA 28046 Madrid Spain
- Saint-Gobain Placo Iberica, SA (2), 77 PASEO DE LA CASTELLANA 27046 Madrid Spain
- Saint-Gobain Placo Iberica, SA (3), C/ PRÍNCIPE DE VERGARA 132 28002 MADRID MADRID Spain
- SAINT-GOBAIN PLACO IBÉRICA, S.A., C/ PRÍNCIPE DE VERGARA 132 28002 MADRID MADRID Spain
- Saint-Gobain PPC Italia SpA, VIA Ettore romagnoli, 6 20146 MILAN Italy
- Saint-Gobain Rigips Austria GesmbH, 24 UNTERKAINISCH 8990 BAD AUSSEE Austria
- SAINT-GOBAIN RIGIPS GMBH, 84 SCHANZENSTRASSE 50549 DÜSSELDORF Germany
- Sasol Germany GmbH, Anckelmannsplatz 1 D-20537 Hamburg Germany
- Schunk Carbon Processing GmbH, Rodheimer Straße 59 35452 Heuchelheim Germany
- Shell Deutschland GmbH, Suhrenkamp 71-77, 22335 Hamburg Germany
- SICIT GROUP SPA, VIA ARZIGNANO 80 36072 CHIAMPÒ (VI) Italy
- SIGMA-ALDRICH CHEMIE GMBH, Riedstrasse 2 89555 Steinheim Germany
- Siniat Sp. z o.o., Przeclawska 8 03-879 Warszawa Poland
- Sival - Gessos Especiais, Lda., R. Emidio Oliveira Faria 2425-879 Souto da Carpalhosa - Leiria Portugal
- Slovenské elektrárne a.s., Mlynske Nivy 47 82109 Bratislava Slovakia
- SNET (Société Nationale d'Electricité et de Thermique), 5 rue d'Athenes FR75009 PARIS France
- Sokolovská uhelná, právní nástupce, a. s., Staré náměstí 69 CZ35601 Sokolov Czech Republic
- Solvay Fluor GmbH, Hans-Boeckler-Allee 20 30173 HANNOVER Germany
- SOPAC-SOCIEDADE PRODUTORA DE ADUBOS COMPOSTOS S.A., Herdade das Praias-Sado 2900-901 SETÚBAL Portugal
- Steag GmbH, Rüttenscheider Straße 1 - 3 45128 Essen North Rhine-Westfalia Germany
- STEAG-EVN Walsum 10 Kraftwerksgesellschaft mbH, Rüttenscheider Straße 1-3 45128 Essen Germany
- STEKLARNA ROGAŠKA d.o.o., Ulica talcev 1 3250 Rogaska Slatina Slovenia
- SUPERBETON S.p.A., Zona industriale, 4/int. 33025 Ovaro Italy
- swb Erzeugung AG & Co. KG, Theodor-Heuss-Allee 20 28215 Bremen Germany
- SWM Services GmbH, Emmy-Noether-Str. 2 80287 München Germany
- Sydkraft Thermal Power AB, Flintrännegatan 19 B 211 24 Malmö Sweden
- TAURON WYTWARZANIE SA, Promienna 51 43-603 Jaworzno Poland
- TE Plomin d.o.o., Plomin Luka 50 52234 Plomin Croatia
- TEDI GmbH & Co. KG, Brackeler Hellweg 301-305 44309 Dortmund NRW Germany
- Tejo Energia, S.A., Quinta da Fonte, Edificio D. Maria I, Piso 2, Ala B 2770-229 Paço d'Arcos Portugal
- Termoelektrarna trbovlje d.o.o., Ob železnici 27 1420 Trbovlje Slovenia
- Termoelektrarna Šoštanj d.o.o., Cesta Lole Ribarja 18 33325 Šoštanj Slovenia
- The Acta Group EU BVBA (2BE30), Place du Luxembourg 2 1050 Brussels Belgium
- TIMAC AGRO, 27 Avenue Franklin Roosevelt BP 70158 35408 SAINT-MALO France
- TIMAC AGRO DUNGEMITTELPRODUCTIONS UND HANDELSGMBH, Industriegelände Pischelsdorf 3435 Zwentendorf Austria
- TIMAC AGRO ESPAÑA SA, Pol. Arazuri-Orcoyen Calle C, n°32 31160 Orcoyen Spain
- TIMAC AGRO ITALIA SPA, Strada Montodine Gombito 26010 Ripalta Arpina Cremona Italy
- Tirreno Power, via barberini, 47 00187 Roma Italy
- Treibacher Industrie AG, Auer-von-Welsbach-Straße 1 9330 Althofen Carinthia Austria
- TRG Cyclamin GmbH, Hohendorfer Straße 20 39218 Schönebeck Germany
- Trianel Kohlekraftwerk Lünen GmbH & Co. KG, Frydagstr. 40 44536 Lünen Germany
- Tribotec GmbH, Industriestrasse 23 A-9601 Arnoldstein Austria
- Tronox France SAS, 95 Rue du General De Gaulle 68800 Thann France
- Turun Seudun Energiantuotanto Oy, Satamatie 16 21100 Naantali Finland
- TÜV SÜD Industrie Service GmbH, Westendstraße 199 80686 München Germany
- Uniper Kraftwerke GmbH, Holzstr. 6 40221 Düsseldorf Germany
- UPL Deutschland, Kölnstr. 107 50321 Brühl Germany Germany
- Uralchem Assist, Johannsessenstrasse 10 30159 Hannover Germany
- V. Bentum Recycling Centrale B.V., Vondelingenplaat 17 3196 KL Rotterdam Netherlands
- VALLI SPA, VIA LAVAGNONE 11 25017 LONATO DEL GARDA BS Italy
- Vaskiluodon Voima Oy, Kirkkopuistikko 0 65100 Vaasa Finland
- Vattenfall Heizkraftwerk Moorburg GmbH, Moorburger Schanze 2 21079 Hamburg Germany
- Vattenfall Wärme Berlin AG, Sellerstraße 16 13353 Berlin Germany
- Venator France SAS, 1 Rue des Garennes 62100 Calais France
- Venator Germany GmbH, Dr.- Rudolf-Sachtleben Str. 4 47198 Duisburg Germany
- VENATOR ITALY S.R.L., Localita Casone 1 58020 Scarlino GR Italy
- Venator P&A Finland Oy, Titaantie 28840 Pori Finland
- Venator P&A Spain S.L., Poligono Industrial Nuevo Puerto Calle A s/n 21810 Palos de la Frontera (Huelva) Spain
- Venator Pigments S.r.l., via G. Reiss Romoli 44/12 10148 Torino Italy
- Venator Uerdingen GmbH, Rheinuferstraße 7-9 47829 Krefeld Germany
- Venator Wasserchemie GmbH, Zeppelinstr. 23 49479 Ibbenbüren Germany
- Vencorex France_1, 196 Allée Alexandre Borodine 69800 Saint Priest France
- VERBUND Thermal Power GmbH & Co KG, Weißenegweg 1 8410 Wildon Austria
- VG-Orth GmbH & Co. KG, Holeyburgweg 24 37627 Stadtoldendorf Germany
- VILLAPANA SPA, Via Pana 238-244 48018 Faenza Emilia Romagna Italy
- Wirbelschichtfeuerungsanlage Elverlingsen GmbH, Auf der Mark 1 58791 Werdohl-Elverlingsen Germany
- WOOLWORTH GmbH, Mönninghoffs Feld 5 59425 Unna NRW Germany
- WTE SRL, Via Panoramica, 38/bis 25132 BRESCIA BS Italy
- Wärme Hamburg GmbH, Andreas-Meyer-Str. 8 22113 Hamburg Germany
- Yara Italia SpA, Via Begnigno Crespi, 57 20159 Milano Italy
- Yara Suomi Oy, Bertel Jungin aukio 9 FI-02600 Espoo Finland
- YEDESA, Autovia del Mediterraneo, salida 537 04628 ANTAS ALMERIA Spain
- YESOS MANCHA, S.A., CAMINO DE LAS CANTERAS, S/N EL ROMERAL 45770 EL ROMERAL TOLEDO Spain
- Yesos Millan, C/Doctor Salvador Caballero Garcia, 72 Autovia A7 Murcia-Almeria Km 574 30890 Puerto Lumbreras Murcia Spain
- YESOS RUBIO C.B, Avenida Juan de la Cierva S/N 30620 Fortuna (Murcia) Spain
- YESOS TORRIQUE, S.A., CARRETERA TOLEDO-CUENCA, KM.57 400 45350 NOBLEJAS TOLEDO Spain
- Yordas GmbH, AuBere Nürnberger Str. 6 91301 Forchheim Germany
- ZAKŁADY CHEMICZNE "Siarkopol" TARNOBRZEG sp. z o.o., Chemiczna 3 39-400 Tarnobrzeg podkarpackie Poland
- ZANGAS Hoch-und Tiefbau GmbH, Schwindgasse 5/1/4 1040 Vienna Vienna Austria
- ZANGAS Hoch-und Tiefbau GmbH, Schwindgasse 5/1/4 1040 Vienna Austria
- Zebra A/S, Strandgade 71-73 1401 Copenhagen Denmark
- Zespól Elektrociepłowni Wrocławskich KOGENERACJA S.A., Lowiecka 24 50-220 Wrocław Poland
- Zespól Elektrowni Patnów - Adamów - Konin S.A., Kazimierska 45 62-510 Konin Poland
- ZGH Boleslaw S.A., Kolejowa 37 32-332 Bukowno Poland
- Zschimmer & Schwarz GmbH & Co KG, Max-Schwarz-Str. 3-5 56112 Lahnstein Germany
- Ørsted Bioenergy & Thermal Power A/S, Kraftværksvej 53 Skærbæk 7000 Fredericia Denmark
- ČEZ, a.s., Duhová 2/1444 140 53 Praha 4 Czech Republic

[Inactive](#)

- A2A SpA, Lamarmora 230 25124 Brescia Italy
- AB "Ignitis gamyba", Elektrinės g. 21 LT-26108 Elektrenai EU Lithuania
- Casimiro Hernández e Hijos, "La Maruxiña" S.A., Avenida de Castilla la Mancha, número 6 45240 Alameda de la Sagra Toledo Spain
- Chemical Inspection & Regulation Service Limited, Room 002, Regus Harcourt Centre D02 HW77 Dublin Ireland
- Drax Group plc, Drax Power Station YO8 8PH Selby North Yorkshire United Kingdom
- EDF Energy (Cottam Power) Ltd, Cottam Power Station DN22 0EU Retford Nottinghamshire United Kingdom
- EDF Energy (Thermal Generation) Ltd, 90 Whitfield Street W1T 4EZ London United Kingdom
- EGGBOROUGH POWER LTD, EGGBOROUGH POWER STATION EGGBOROUGH DN14 0BS GOOLE EAST YORKSHIRE United Kingdom
- Electrabel S.A., Boulevard Simon Bolivar, 34 ENGIE Tower 1000 Bruxelles Belgium
- Energie AG Oberösterreich Kraftwerke GmbH, Böhmerwaldstraße 3 4021 Linz Austria
- Evonik Power Saar GmbH, Rüttenscheider Straße 1-3 45128 Essen Germany
- IBERDROLA GENERACIÓN TERMICA S.L., Plaza Euskadi 5 48009 Bilbao Spain
- Keadby Generation Limited, Keadby Power Station PO Box 89 DN173AZ Keadby Scunthorpe United Kingdom
- Mexichem UK Limited, The Heath Business and Technical Park WA7 4QX Runcorn Cheshire United Kingdom
- NATURGY GENERACIÓN S.L.U., Avda. San Luis nº 77 28033 Madrid Spain Spain
- NV EPZ, Zeedijk 32 4454 PM Borssele Netherlands
- PVO-Lämpövoima Oy, PL 40 00101 Helsinki Finland
- REVATECH s.a, Zoning Industriel d'Ehein 4480 Engis Belgium
- Rugeley Power Limited, Rugeley Power Station WS15 1PR Rugeley Staffordshire United Kingdom
- Solvay Sodi AD, Industrial Zone 9160 DEVNYA Bulgaria
- Stadtwerke Duisburg, Bungertstrasse 27 47053 Duisburg Germany
- Tarmac Cement and Lime Ltd, Portland House Bickenhill Lane B37 7BQ Solihull Birmingham United Kingdom
- Thermphos International B.V., Europaweg Zuid 4, Haven 9890, 4389 PD Rittthem / Vlissingen Netherlands
- Umicore NV/SA, Rue du Marais 31 1000 Brussels Belgium
- Uniper UK Limited, Compton House 2300 The Crescent, Birmingham Business Park B37 7YE Birmingham West Midlands United Kingdom
- Viesgo Producción, S.L.U., C/ ISABEL TORRES, 25 39011 Cantabria Cantabria Spain

[Substance names and other identifiers](#)[Regulatory process names](#)

Calcium sulfate	EC Inventory, REACH pre-registration, Other
Calcium sulfate	REACH pre-registration, Other, Cosmetic Products Regulation, Annex IV - Allowed Colorants

Translated names

[CAS names](#)

Sulfuric acid, calcium salt (1:1)	Other
-----------------------------------	-------

IUPAC names	
Anhidrita	Registration dossier
Anhydrite	Registration dossier
Calcio Sulfato 2-hidrato	C&L Inventory
CALCIUM SULFATE	C&L Inventory, Registration dossier, Other
Calcium Sulfate	C&L Inventory, Registration dossier, Other
Calcium sulfate (All calcium sulfates are covered by the registration of the anhydrous form.)	Registration dossier
Calcium sulfate / gypsum	Registration dossier
Calcium sulfate dihydrate	C&L Inventory, Registration dossier
Calcium Sulfate Dihydrate	Registration dossier
CALCIUM SULPHATE	C&L Inventory, Registration dossier
CALCIUM SULPHATE	C&L Inventory, Registration dossier
Calcium sulphate dihydrate	Registration dossier
Calcium sulphate dihydrate	Registration dossier
Calcium sulphate hemihydrate	Registration dossier
Calcium Sulphate Whisker	Registration dossier
calcium;sulfate	Registration dossier, Other
Calciumsulfatbinder CAB30	Registration dossier
Calciumsulfate dihydrate	Registration dossier
calcium sulfate	Registration dossier
CaSO4.2H2O	C&L Inventory
Energosádrovec	Registration dossier
Gips	Registration dossier
gypse	Registration dossier
Gypsum	Registration dossier
Gypsum (flue gas desulphurization)	Registration dossier
GYPSUM - CALCIUM SULFATE	Registration dossier
gypsum, calcium sulfate	Registration dossier
Gypsum- Anhydrite	Registration dossier
gypsum (flue gas desulphurization)	Registration dossier
gypsum (flue gas desulphurization)	Registration dossier
Odpady z wapniowych metod odsiarczania gazów odlotowych	Registration dossier
REA Gips	Registration dossier
REA – Gips / FGD - Gypsum	Registration dossier
REA-Gips	Registration dossier
REA-Gips / FGD-Gypsum	Registration dossier
Reagips	Registration dossier
siarczan wapnia, gips	Registration dossier
Sulcabai	Registration dossier
Sulphuric acid calcium salt (1:1)	C&L Inventory
White gypsum	Registration dossier
Trade names	
AgroSulCa	Registration dossier
AISLAYOLA	Registration dossier
AISLAYOLA P	Registration dossier
Alabaster	Registration dossier
Amphore	Registration dossier
ANHIDRITA	Registration dossier
Anhydrit	Registration dossier
Anhydrite	Registration dossier
Anhydrous calcium sulfate	Registration dossier
Anhydrous gypsum	Registration dossier
B81	Registration dossier
Basic calcium sulfate	Registration dossier
Baugips, Stuckgips	Registration dossier
Calcium (II) sulfate dihydrated (1:1:2)	Registration dossier
Calcium Sulfate	Registration dossier
Calcium Sulfate Anhydrite	Registration dossier
Calcium sulfate dihydrat	Registration dossier
Calcium sulfate dihydrate	Registration dossier
Calcium sulfate, anhydrous	Registration dossier
calcium sulfate, synthetic	Registration dossier
Calcium Sulphate	Registration dossier
Calcium Sulphate Dihydrate	Registration dossier
Calciumsulfatdihydrat	Registration dossier
Cegips	Registration dossier
clean gypsum	Registration dossier
Construct Gips	Registration dossier

Decogips	Registration dossier
DESULFOGYPSE	Registration dossier
DSG	Registration dossier
EL DUENDE	Registration dossier
Energosadrovec ENOS	Registration dossier
Energosádrovec	Registration dossier
FDP-Gypsum	Registration dossier
Fertilizer	Registration dossier
FGD Gypsum	Registration dossier
FGD-Gypsum	Registration dossier
FGD-Gypsum / REA Gips	Registration dossier
FGD-Gypsum / REA-Gips	Registration dossier
FGD-Gypsum/REA Gips	Registration dossier
Flue Gas Desulphurization	Registration dossier
Flue Gas Desulphurization, Gypsum	Registration dossier
Frantumato	Registration dossier
Fuoco	Registration dossier
gessato	C&L Inventory
Gessi colla	Registration dossier
Gessi Lastra Standard	Registration dossier
Gesso alabastrino	Registration dossier
Gesso Cotto	Registration dossier
Gesso da DSO	Registration dossier
gesso di parigi	Registration dossier
gesso in polvere	Registration dossier
gesso scagliola	Registration dossier
GIBS	Registration dossier
Gips	Registration dossier
gips FGD	Registration dossier
gips syntetyczny	Registration dossier
Gips z instalacji odsiarczania spalin	Registration dossier
Gips z odsiarczania spalin	Registration dossier
Gips z wapiennej metody odsiarczania gazów odlotowych (reagips)	Registration dossier
gipsas	Registration dossier
Glettgipsz	Registration dossier
gyproc	Registration dossier
Gypse	Registration dossier
Gypsite	Registration dossier
Gypsum	Registration dossier
Gypsum from flue gas wet desulphurization	Registration dossier
Gypsum slurry	Registration dossier
Hochbrandgips A3	Registration dossier
Hochbrandgips Keuper M	Registration dossier
Ibercol	Registration dossier
Iberplast	Registration dossier
Idro	Registration dossier
INDAYOLA	Registration dossier
Kalziumsulfatdihydrat	Registration dossier
legante a base gesso	Registration dossier
Lime Anhydrous Sulfate	Registration dossier
Longips	Registration dossier
Malta di Rocca	Registration dossier
Marmorgips A3	Registration dossier
Mecafino	Registration dossier
Model Gips	Registration dossier
NATURGESSO	Registration dossier
Naturgips, Gipsstein, Anhydrit, Gips, Calciumsulfat-Dihydrat, Calciumsulfat-Halbhydrat, Alabaster, Selenit, Marienglas, ...	Registration dossier
nawóz	Registration dossier
Nawóz wapniowo-magnezowy	Registration dossier
Paris Plaster	Registration dossier
Perlinor	Registration dossier
phosphogypse	Registration dossier
Phosphogypsum	Registration dossier
PLASTER OF PARIS	Registration dossier
Plaster of Paris, anhydrite	Registration dossier
Precipitated calcium sulfate	Registration dossier
produkt uboczny z instalacji mokrego odsiarczania spalin	Registration dossier
Produkt z odsiarczania metoda mokra	Registration dossier

produkty uboczne z instalacji mokrego odsiarczania spalin	Registration dossier
Proyal	Registration dossier
Proyal XXI	Registration dossier
Puroplast	Registration dossier
R25	Registration dossier
R41	Registration dossier
RCgips	Registration dossier
REA - Gips	Registration dossier
REA Gips	Registration dossier
REA-Gips	Registration dossier
REA-Gips(FGD gypsum)	Registration dossier
REA-Gips, Calciumsulfat Dihydrate	Registration dossier
REA-Gips, powergips	Registration dossier
REA-Gips, steagips	Registration dossier
REA-Gips, steagips, powergypsum	Registration dossier
Residues, calcium sulfate-contg., flue gas wet desulfurization neutralization	Registration dossier
Rifin	Registration dossier
Rifix	Registration dossier
rigips	Registration dossier
Rimano	Registration dossier
RO-gips	Registration dossier
sadra	Registration dossier
sadrovec	Registration dossier
Scagliola nera	Registration dossier
Scagliola rossa	Registration dossier
Siarczan wapnia 2-wodny	Registration dossier
Siarczan wapnia dwuwodny	Registration dossier
Siarczan wapniowo-magnezowy	Registration dossier
Sistemas Placo	Registration dossier
solfato di calcio emidrato	Registration dossier
Stałe odpady z wapniowych metod odsiarczania gazów odlotowych	Registration dossier
Stucco Gessi rapido	Registration dossier
Stucco Gessi super rapido	Registration dossier
Sulfate de calcium	Registration dossier
SULFURIC ACID CALCIUM SALT	Registration dossier
Sulfuric acid, calcium salt	Registration dossier
Sulfuric acid, calcium salt (1:1)	Registration dossier
Sulphate, Calcium	Registration dossier
Synthetic anhydrite	Registration dossier
synthetic anhydrite	Registration dossier
Synthetic gypsum	Registration dossier
Sádra	Registration dossier
UTX-2N	Registration dossier
YESODUR PLUS X	Registration dossier
YESODUR R	Registration dossier
YESODUR-1	Registration dossier
YESOFIX	Registration dossier
YESOLITA	Registration dossier
YESOPLAST	Registration dossier
YESOS BLANCO	Registration dossier
YESOS RAPIDO	Registration dossier
Other names	

[Other identifiers](#)

1314087-18-7	CAS number	Other
1314087-18-7	Deleted CAS number	Other
1428662-16-1	CAS number	Other
1428662-16-1	Deleted CAS number	Other
146522-67-0	CAS number	Other
146522-67-0	Deleted CAS number	Other
151621-69-1	CAS number	Other
151621-69-1	Deleted CAS number	Other
23296-15-3	CAS number	Other
23296-15-3	Deleted CAS number	Other
326855-67-8	CAS number	Other
326855-67-8	Deleted CAS number	Other
7778-18-9	CAS number	EC Inventory, C&L Inventory, Registration dossier, REACH pre-registration, Other, Cosmetic Products Regulation, Annex IV - Allowed Colorants
871982-24-0	CAS number	Other
871982-24-0	Deleted CAS number	Other
99400-01-8	CAS number	Other
99400-01-8	Deleted CAS number	Other

Scientific properties**Physical and chemical properties**

This section provides physicochemical information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.

[Appearance/physical state / colour](#)

Study results 4 studies submitted
0 studies processed

 No automatically processable data submitted

[Type of Study provided](#)**Studies with data**

Weight of evidence 4

Data waiving

no waivers

 **Summaries** 2 summaries submitted
2 summaries processed

Physical state at 20°C and 1013 hPa

Solid (100%)

[Melting/freezing point](#)

Study results 3 studies submitted
0 studies processed

 No automatically processable data submitted

[Type of Study provided](#)**Studies with data**

Weight of evidence 3

Data waiving

no waivers


 **Summaries** 1 summary submitted
1 summary processed

Melting / freezing point at 101 325 Pa





1 450 °C

Boiling point

Study results 1 study submitted
0 studies processed

 No automatically processable data submitted


Type of Study provided

Studies with data    

Data waiving


Sci. unjustified 1

Summaries 0 summaries submitted
0 summaries processed





 No data available

Density

Study results 4 studies submitted
0 studies processed

 No automatically processable data submitted

Type of Study provided

Studies with data    

Weight of evidence 4

Data waiving


no waivers

Summaries 1 summary submitted
1 summary processed





Relative density at 20°C
2.96

Vapour pressure

Study results 1 study submitted
0 studies processed

 No automatically processable data submitted


Type of Study provided

Studies with data    

Data waiving

Sci. unjustified 1

Summaries 0 summaries submitted
0 summaries processed

 No data available

Partition coefficient

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Not feasible 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Water solubility

Study results 5 studies submitted
1 study processed

R **Water solubility (mass/vol.)**
2.4 g/L @ 20 °C and pH 7.7 [1]

Type of Study provided

Studies with data    

Key study 1

Supporting study 2 2

Data waiving

no waivers

R **Summaries** 1 summary submitted
1 summary processed

Water solubility
2.4 g/L @ 20 °C

Solubility in organic solvents / fat solubility
⚠ Data not provided by the registrant

Surface tension

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Sci. unjustified 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Flash point

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Not feasible 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Auto flammability

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Other 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Flammability

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Other 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Explosiveness

Study results 1 study submitted
0 studies processed

 No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Sci. unjustified 1

Summaries 0 summaries submitted
0 summaries processed

 No data available

Oxidising

Study results 1 study submitted
0 studies processed

 No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Sci. unjustified 1

Summaries 0 summaries submitted
0 summaries processed

 No data available

Oxidation reduction potential
 Data not provided by the registrant

pH
 Data not provided by the registrant

Dissociation constant

Study results 1 study submitted
1 study processed

Dissociating properties
Yes (100%) [1]

Dissociation constant
4.35 @ 25 °C [1]

Type of Study provided

Studies with data    

Key study 1

Data waiving

no waivers

Summaries 1 summary submitted
1 summary processed





pKa at 20 °C
4.35

Viscosity

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Not feasible 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Environmental fate and pathways

This section provides environmental fate and pathways information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.





Phototransformation in air
⚠ Data not provided by the registrant

Hydrolysis

Study results 1 study submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Studies with data    

Data waiving

Other 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Phototransformation in water
⚠ Data not provided by the registrant





Phototransformation in soil
⚠ Data not provided by the registrant

Biodegradation in water - screening tests

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Not feasible 1

Summaries 1 summary submitted
0 summaries processed

⚠ No automatically processable data submitted

Biodegradation in water & sediment - simulation tests

Study results 0 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Studies with data ⚠ 📄 📊 📈

Data waiving

no waivers

Summaries 1 summary submitted
0 summaries processed

⚠ No automatically processable data submitted

Biodegradation in soil

Study results 1 study submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Studies with data ⚠ 📄 📊 📈

Data waiving

Other 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Bioaccumulation: aquatic / sediment

Study results 1 study submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Studies with data ⚠ 📄 📊 📈

Data waiving

Other 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Bioaccumulation: terrestrial

Study results 1 study submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Studies with data    

Data waiving

Other 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Adsorption/desorption

Study results 2 studies submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving

Not feasible 1

Other 1

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Henry's law constant (H)

⚠ Data not provided by the registrant

Distribution modelling

⚠ Data not provided by the registrant

Ecotoxicological information

This section provides ecotoxicological information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.

Predicted No-Effect Concentration (PNEC)

R Summaries

1 summary submitted
1 summary processed

The Predicted No-Effect Concentration (PNEC) value is the concentration of a substance below which adverse effects in the environment are not expected to occur. Please note that when more than one summary is provided, PNEC values may refer to constituents of the substance and not to the substance as a whole. More detailed information is available in the dossiers.

Hazard for Aquatic Organisms

Freshwater	No hazard identified (1)
Intermittent releases (freshwater)	No hazard identified (1)
Marine water	No hazard identified (1)
Intermittent releases (marine water)	No hazard identified (1)
Sewage treatment plant (STP)	100 mg/L (1)
Sediment (freshwater)	No hazard identified (1)
Sediment (marine water)	No hazard identified (1)

Hazard for Air

Air	No hazard identified (1)
-----	--------------------------

Hazard for Terrestrial Organism

Soil	No hazard identified (1)
------	--------------------------

Hazard for Predators

Secondary poisoning	No potential for bioaccumulation (1)
---------------------	--------------------------------------

Short-term toxicity to fish

Study results 6 studies submitted
3 studies processed

P/R Results

LC50 (4 days) 79 - 2 980 mg/L [3]

Type of Study provided

Studies with data				
Supporting study	3			
Weight of evidence	3			

Data waiving

no waivers

Summaries 1 summary submitted
0 summaries processed

No automatically processable data submitted

Long-term toxicity to fish

Study results 1 study submitted
0 studies processed

No automatically processable data submitted

Type of Study provided

Studies with data				
Other	1			

Data waiving

Other 1

Summaries 0 summaries submitted
0 summaries processed

No data available

Short-term toxicity to aquatic invertebrates

Study results 6 studies submitted
2 studies processed

P/R Results

LC50 (48 h) 79 - 1 970 mg/L [3]

Type of Study provided

Studies with data

Supporting study	3			
Weight of evidence	3			

Data waiving

no waivers

Summaries 1 summary submitted
0 summaries processed

No automatically processable data submitted

Long-term toxicity to aquatic invertebrates

Study results 1 study submitted
0 studies processed

No automatically processable data submitted

Type of Study provided

Studies with data

Other	1			

Data waiving

no waivers

Summaries 0 summaries submitted
0 summaries processed

No data available

Toxicity to aquatic algae and cyanobacteria

Study results 4 studies submitted
1 study processed

P/R Results

EC50 (72 h) 79 mg/L [1]

Type of Study provided

Studies with data

Supporting study	1			
Weight of evidence	3			

Data waiving

no waivers

Summaries 1 summary submitted
0 summaries processed

No automatically processable data submitted

Toxicity to aquatic plants other than algae
 Data not provided by the registrant

Toxicity to microorganisms

Study results 1 study submitted
1 study processed

P/R Results
 EC50 (3 h) 1 g/L [1]
 NOEC (3 h) 1 g/L [1]

Type of Study provided

Studies with data

Key study	1
-----------	---

Data waiving
no waivers

R Summaries 1 summary submitted
1 summary processed

EC10 or NOEC for microorganisms
1 g/L

Sediment toxicity

Study results 1 study submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data

Data waiving

Other	1
-------	---

Summaries 0 summaries submitted
0 summaries processed

⚠ No data available

Endocrine disrupter testing in aquatic vertebrates – in vivo
 ⚠ Data not provided by the registrant

Toxicity to terrestrial macroorganisms except arthropods

Study results 2 studies submitted
0 studies processed

⚠ No automatically processable data submitted

Type of Study provided

Studies with data

Data waiving


Other	2
-------	---

Summaries 0 summaries submitted
0 summaries processed





⚠ No data available

Toxicity to terrestrial arthropods

Study results 1 study submitted
0 studies processed

 No automatically processable data submitted


Type of Study provided

Studies with data    

Data waiving


Other 1

Summaries 0 summaries submitted
0 summaries processed





 No data available

Toxicity to terrestrial plants

Study results 4 studies submitted
0 studies processed

 No automatically processable data submitted

Type of Study provided


Studies with data    

Supporting study 2

Data waiving


Other 2

Summaries 1 summary submitted
0 summaries processed





 No automatically processable data submitted

Toxicity to soil microorganisms

Study results 1 study submitted
0 studies processed

 No automatically processable data submitted


Type of Study provided

Studies with data    

Data waiving

Other 1

Summaries 1 summary submitted
0 summaries processed

 No automatically processable data submitted

Toxicity to birds

Study results 1 study submitted
0 studies processed

 No automatically processable data submitted

Type of Study provided

Studies with data    

Data waiving
Other 1

Summaries 0 summaries submitted
0 summaries processed

 No data available

Toxicity to mammals
 Data not provided by the registrant

Toxicological information

This section provides toxicological information compiled from all automatically processable data from REACH registration dossiers that is available to ECHA at the time of generation. The quality and correctness of the information remains the responsibility of the data submitter. The Agency thus cannot guarantee the correctness of the information displayed.

Derived No- or Minimal Effect Level (DN(M)EL)

[M/C](#) [Summaries](#)

1 summary submitted
1 summary processed

The derived no- or minimum effect level (DN(M)EL) is the level of exposure above which a human should not be exposed to a substance. Please note that when more than one summary is provided, DN(M)EL values may refer to constituents of the substance and not to the substance as a whole. More detailed information is available in the dossiers.

Data for WORKERS

INHALATION Exposure	Threshold	Most sensitive study
Long-term:	(DNEL) 21.17 mg/m ³	repeated dose toxicity
Acute /short term:	(DNEL) 5 082 mg/m ³	acute toxicity

Long-term:	No hazard identified
Acute /short term:	No hazard identified

DERMAL Exposure	Threshold	Most sensitive study
Long-term:	No hazard identified	
Acute /short term:	No hazard identified	

Long-term:	No hazard identified
Acute /short term:	No hazard identified

EYE Exposure

No hazard identified

Data for the GENERAL POPULATION

INHALATION Exposure	Threshold	Most sensitive study
Long-term:	(DNEL) 5.29 mg/m ³	repeated dose toxicity
Acute /short term:	(DNEL) 3 811 mg/m ³	acute toxicity

Long-term:	No hazard identified
Acute /short term:	No hazard identified

DERMAL Exposure	Threshold	Most sensitive study
Long-term:	No hazard identified	
Acute /short term:	No hazard identified	

Long-term:	No hazard identified
Acute /short term:	No hazard identified

ORAL Exposure	Threshold	Most sensitive study
Long-term:	(DNEL) 1.52 mg/kg bw/day	repeated dose toxicity
Acute /short term:	(DNEL) 11.4 mg/kg bw/day	acute toxicity

EYE Exposure

No hazard identified

Toxicokinetics, metabolism, and distribution

Study results

Study data: basic toxicokinetics 2 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Study data: basic toxicokinetics

Studies with data

Key study 1

Data waiving

Other 1

Study data: dermal absorption 0 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Study data: dermal absorption

Studies with data

Data waiving

no waivers

M/C **Summaries** 1 summary submitted
1 summary processed

Bioaccumulation potential:

Low bioaccumulation potential

Acute toxicity

Study results

oral 3 studies submitted
1 study processed

P/R **Results**
LD50 1 581 mg/kg bw (rat) [1]

M/C **Interpretations of results**
GHS criteria not met [1]

Type of Study provided

oral

Studies with data

Key study 1

Supporting study 2

Data waiving

no waivers

inhalation 1 study submitted
1 study processed

P/R Results

LC50 (4 h) 3.26 mg/L air (rat) [1]

M/C Interpretations of results

GHS criteria not met [1]

inhalation

Studies with data



Key study 1

Data waiving

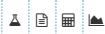
no waivers

dermal 1 study submitted
0 studies processed

▲ No automatically processable data submitted

dermal

Studies with data



Data waiving

Other 1

other routes 0 studies submitted
0 studies processed

▲ No data available

other routes

Studies with data



Data waiving

no waivers

M/C Summaries

1 summary submitted
1 summary processed

Oral route:

No adverse effect observed LD50 1 581 mg/kg bw

Inhalation route:

No adverse effect observed LC50 2 610 mg/m³

Irritation / corrosion

Study results

Study data: skin 2 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Study data: skin

Studies with data	⚠	📄	📅	📈
Key study	1			
Data waiving				
Sci. unjustified	1			

Study data: eye 4 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Study data: eye

Studies with data	⚠	📄	📅	📈
Key study	1			
Supporting study			1	1
Data waiving				
Sci. unjustified	1			

M/C **Summaries** 1 summary submitted
1 summary processed

Skin
No adverse effect observed (not irritating)

Eye
No adverse effect observed (not irritating)

Respiratory
No study available

Sensitisation

Study results

Study data: skin 2 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Study data: skin

Studies with data				
Key study	1			
Data waiving				
Sci. unjustified	1			

Study data: respiratory 0 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Study data: respiratory

Studies with data				
Data waiving				
no waivers				
M/C Summaries	2 summaries submitted 2 summaries processed			

Skin sensitisation
No adverse effect observed (not sensitising)

Respiratory sensitisation
No study available

Repeated dose toxicity

Study results

Study data: oral 9 studies submitted
1 study processed

P/R Results

NOAEL (rat): 79 - 790 mg/kg bw/day [2]
LOAEL (rat): 237 mg/kg bw/day [1]

Type of Study provided

Study data: oral

Studies with data				
Key study	1			
Supporting study	6			
Data waiving				
Sci. unjustified	2			

Study data: inhalation 7 studies submitted
0 studies processed

No automatically processable data submitted

Study data: inhalation

Studies with data				
Supporting study	4			
Data waiving				
Sci. unjustified	3			

Study data: dermal 3 studies submitted
0 studies processed

No automatically processable data submitted

Study data: dermal

Studies with data				
Data waiving				
Sci. unjustified	3			

Summaries 1 summary submitted
0 summaries processed

No automatically processable data submitted

Genetic toxicity

Study results 9 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Study data: in vitro

Studies with data				
Key study	2			
Supporting study	6			

Data waiving

Sci. unjustified 1

Study data: in vivo 1 study submitted
0 studies processed

⚠ Study data not processed for brief profile

Study data: in vivo

Studies with data				
Key study	1			

Data waiving

no waivers

M/C **Summaries** 1 summary submitted
1 summary processed

Toxicity - InVitro
No adverse effect observed (negative)

Toxicity - InVivo
No adverse effect observed (negative)

Carcinogenicity

Study results 3 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Studies with data				
Supporting study	2			

Data waiving

Other 1

Summaries 1 summary submitted
0 summaries processed

⚠ No automatically processable data submitted

Toxicity to reproduction

Study results

Study data: reproduction 2 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Type of Study provided

Study data: reproduction

Studies with data

--	--	--	--	--

Key study 1

Data waiving

Sci. unjustified 1

Study data: developmental 2 studies submitted
0 studies processed

⚠ Study data not processed for brief profile

Study data: developmental

Studies with data

--	--	--	--	--

Key study 1

Data waiving

Sci. unjustified 1

Study data: other studies 1 study submitted
0 studies processed

⚠ Study data not processed for brief profile

Study data: other studies

Studies with data

--	--	--	--	--

Supporting study 1

Data waiving

no waivers

[M/C](#) **Summaries** 1 summary submitted
1 summary processed

Effect on fertility

Oral route:
No adverse effect observed NOAEL 790 mg/kg bw/day (subacute, rat)

Neurotoxicity
⚠ Data not provided by the registrant

Immunotoxicity
⚠ Data not provided by the registrant

Endocrine disrupter mammalian screening - in vivo
▲ Data not provided by the registrant

Legend	Type of study
▲	Experimental results
📄	Read across based on grouping of substance (category approach) or Read-across from supporting substance (structural analogue or surrogate)
📊	Estimated by calculation or (Q)SAR
🏗️	Experimental study planned, other or unspecified

Type of aggregation

C	Concatenated distinct values
R	Range of values
P/R	Prioritisation (Eco)Toxicology AND Range of values
M/C	Most Conservative of values

The brief profile is based on non-confidential data contained in ECHA's databases at the time of generation. Please be aware that as additional data is submitted to ECHA, the brief profile will also be updated to reflect the new situation. All data remain the property of its respective owners.

Note that the brief profile is an automatically generated summary and that not all available data may be displayed. The content is subject to change without prior notice. The information has not been reviewed or verified by ECHA or any other authority. The Agency thus cannot guarantee the correctness of the information displayed. The identification of applicable legislative frameworks is done automatically and without manual verification. Therefore this does not constitute official and legally binding information. To confirm if a substance is covered by a specific legislative framework the official publication should be consulted.

Reproduction or further distribution of this information may be subject to copyright protection. Use of the information without obtaining the permission from the owner(s) of the respective information might violate the rights of the owner. The Agency does not take any responsibility whatsoever for any copyright or other infringements that may be caused by using the information. This brief profile is covered by the

[ECHA Legal Notice](#)



Use of this information is subject to copyright laws and may require the permission of the owner of the information, as described in the [ECHA Legal Notice](#).

REACH

Barium sulfate

EC number: 231-784-4 | CAS number: 7727-43-7



Substance identity

Identification

	Display Name:	Barium sulfate
	EC Number:	231-784-4
	EC Name:	Barium sulfate
	CAS Number:	7727-43-7
	Molecular formula:	BaO4S
	IUPAC Name:	barium sulfate

Type of Substance

Composition: mono-constituent substance

Origin: inorganic

Substance Identifiers

Trade name

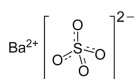
- BARIACE
- BARIFINE
- BLANC FIXE
- Barium sulfate
- Bianco Fisso M 0,7
- Bianco Fisso M 0,7 DREAM
- Bianco Fisso M 0,7 PLUS
- Bianco Fisso M 0,8
- Bianco Fisso M 1,5
- Bianco Fisso M 3,0 LO
- Blanc Fixe
- Blanc fixe
- FASTOGEN Blue
- FASTOGEN Green
- FASTOGEN Super Blue
- FASTOGEN Super Red
- FASTOGEN Super Violet
- Flake Shaped Barium Sulfate
- KET Blue
- KET Red
- KET Yellow
- Precipitated Barium Sulfate
- SACHTOPERSE
- SYMULER Brilliant Carmine 6B
- SYMULER Fast Red
- SYMULER Fast Violet
- SYMULER Fast Yellow
- SYMULER Lake Red

Compositions

Boundary Composition(s)

Barium sulfate

State Form: solid: bulk

Constituent 1Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

CAS Number: 7727-43-7

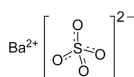
Molecular formula: BaO4S

IUPAC Name: barium sulfate

barium sulfate_Nanoform

Nanoform

State Form: solid: nanoform

Constituent 1Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

CAS Number: 7727-43-7

Molecular formula: BaO4S

IUPAC Name: barium sulfate

Characterisation of nanoforms

Type of information reported: single nanoform

Name of nanoform: Barite

Shape**Shape description**

Shape category: spheroidal

Shape: spherical

Pure shape: yes

Typical composition: 100 %

Particle size distribution and range

Particle size distribution and range

Shape category: spheroidal

Percentile

Percentile 1

Percentile: D10

Typical value: ca. 50 nm

Range: $\geq 20 - \leq 60$ nm

Percentile 2

Percentile: D50

Typical value: ca. 80 nm

Range: $\geq 30 - \leq 80$ nm

Percentile 3

Percentile: D90

Typical value: ca. 120 nm

Range: $\geq 50 - \leq 120$ nm

Typical aspect ratio (:1): 1.3 :1

Additional information: Typical aspect ratio (:1) 1.3

Fraction of constituent particles in the size range 1-100 nm: $\geq 50 - \leq 100$ %

Crystallinity

Structures

Structure: crystalline

Name: Barite

Pure structure: yes

Typical composition: 95 %

Range: $\geq 90 - \leq 100$ %

Specific surface area

Typical specific surface area: ca. 13.5 m²/g

Range of specific surface area: $\geq 10 - \leq 15$ m²/g

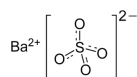
Surface functionalisation / treatment

Surface treatment applied: no

Legal Entity Composition(s)

barium sulfate

State Form: solid: particulate/powder

Constituent 1Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

CAS Number: 7727-43-7

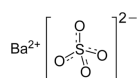
Molecular formula: BaO4S

IUPAC Name: barium sulfate

barium sulfate_Nanoform

Nanoform

State Form: solid: nanoform

Constituent 1Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

CAS Number: 7727-43-7

Molecular formula: BaO4S

IUPAC Name: barium sulfate

Characterisation of nanoforms

Type of information reported: single nanoform

Name of nanoform: Barite

Shape**Shape description**

Shape category: spheroidal

Shape: spherical

Pure shape: yes

Typical composition: 100 %

Particle size distribution and range

Particle size distribution and range

Shape category: spheroidal

Percentile

Percentile 1

Percentile: D10

Typical value: ca. 50 nm

Range: $\geq 20 - \leq 60$ nm

Percentile 2

Percentile: D50

Typical value: ca. 80 nm

Range: $\geq 30 - \leq 80$ nm

Percentile 3

Percentile: D90

Typical value: ca. 120 nm

Range: $\geq 50 - \leq 120$ nm

Typical aspect ratio (:1): 1.3 :1

Additional information: Typical aspect ratio (:1) 1.3

Fraction of constituent particles in the size range 1-100 nm: $\geq 50 - \leq 100$ %

Crystallinity

Structures

Structure: crystalline

Name: Barite

Pure structure: yes

Typical composition: 95 %

Range: $\geq 90 - \leq 100$ %

Specific surface area

Typical specific surface area: ca. 13.5 m²/g

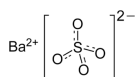
Range of specific surface area: $\geq 10 - \leq 15$ m²/g

Surface functionalisation / treatment

Surface treatment applied: no

Barium sulfate

State Form: solid; bulk

Constituent 1

Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

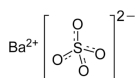
CAS Number: 7727-43-7

Molecular formula: BaO4S

IUPAC Name: barium sulfate

Barium sulfate

State Form: solid: particulate/powder

Constituent 1

Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

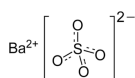
CAS Number: 7727-43-7

Molecular formula: BaO4S

IUPAC Name: barium sulfate

Composition 7

State Form: solid: bulk

Constituent 1

Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

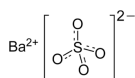
CAS Number: 7727-43-7

Molecular formula: BaO4S

IUPAC Name: barium sulfate

Barium Sulfate

State Form: solid: particulate/powder

Constituent 1

Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

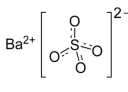
EC Name: Barium sulfate

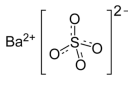
CAS Number: 7727-43-7

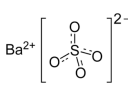
Molecular formula: BaO4S

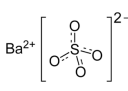
IUPAC Name: barium sulfate

Bariumsulfat

State Form:	solid: particulate/powder	
Constituent 1		
	Reference substance name:	Barium sulfate
	EC Number:	231-784-4
	EC Name:	Barium sulfate
	CAS Number:	7727-43-7
	Molecular formula:	BaO4S
IUPAC Name:	barium sulfate	

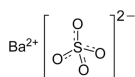
barium sulfate		
Constituent 1		
	Reference substance name:	Barium sulfate
	EC Number:	231-784-4
	EC Name:	Barium sulfate
	CAS Number:	7727-43-7
	Molecular formula:	BaO4S
IUPAC Name:	barium sulfate	

Barium sulphate		
State Form:	solid: bulk	
Constituent 1		
	Reference substance name:	Barium sulfate
	EC Number:	231-784-4
	EC Name:	Barium sulfate
	CAS Number:	7727-43-7
	Molecular formula:	BaO4S
IUPAC Name:	barium sulfate	

Barium sulfate		
Constituent 1		
	Reference substance name:	Barium sulfate
	EC Number:	231-784-4
	EC Name:	Barium sulfate
	CAS Number:	7727-43-7
	Molecular formula:	BaO4S
IUPAC Name:	barium sulfate	

Barium sulphate

Constituent 1



Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

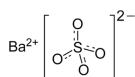
CAS Number: 7727-43-7

Molecular formula: BaO4S

IUPAC Name: barium sulfate

Barium Sulfate

Constituent 1



Reference substance name: [Barium sulfate](#)

EC Number: 231-784-4

EC Name: Barium sulfate

CAS Number: 7727-43-7

Molecular formula: BaO4S

IUPAC Name: barium sulfate

Composition(s) generated upon use

Other types of composition(s)

Information on Registered Substances comes from registration dossiers which have been assigned a registration number. The assignment of a registration number does however not guarantee that the information in the dossier is correct or that the dossier is compliant with Regulation (EC) No 1907/2006 (the REACH Regulation). This information has not been reviewed or verified by the Agency or any other authority. The content is subject to change without prior notice.

Reproduction or further distribution of this information may be subject to copyright protection. Use of the information without obtaining the permission from the owner(s) of the respective information might violate the rights of the owner.

Use of this information is subject to copyright laws and may require the permission of the owner of the information, as described in the [ECHA Legal Notice](#).

REACH

Barium carbonate

EC number: 208-167-3 | CAS number: 513-77-9



Substance identity

Identification

	Display Name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate

Type of Substance

Composition: mono-constituent substance

Origin: inorganic

Substance Identifiers

Trade name

- BARIO CARBONATO
- Barium Carbonate
- Barium Carbonate FF Powder 99% min.
- Barium Carbonate Free Flowing
- Barium Carbonate Granular 99% min.
- Barium Carbonate Light Precipitated 99% min.
- Barium carbonate
- Barium carbonate AML
- Barium carbonate GMSA
- Bariumcarbonat Free Flowing
- Besondere Bariumcarbonat
- CARBONATO BARIO ESPECIAL
- CARBONATO BARIO GRANULAR
- CARBONATO BARIO POLVO Free Flowing
- Carbonate de Baryum Free Flowing
- Carbonate de Baryum Granulé
- Carbonate de Baryum Spécial
- Extra barium carbonate
- Granular Barium Carbonate
- Körnige Bariumcarbonat
- Special Barium Carbonate
- barium carbonate

Compositions

Boundary Composition(s)

[barium carbonate](#)

State Form: solid; particulate/powder

Constituent 1

Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

[Barium carbonate](#)

State Form: solid: bulk

Constituent 1

Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

Legal Entity Composition(s)

[barium carbonate](#)

State Form: solid: particulate/powder

Constituent 1

Ba²⁺


Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

[Barium Carbonate BM020](#)

Nanoform

State Form: solid: nanoform

Constituent 1

	Reference substance name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate

Characterisation of nanoforms

Type of information reported: single nanoform

Shape**Shape description**

Shape category:	elongated
Shape:	rod
Pure shape:	yes
Typical composition:	100 %

Particle size distribution and range

Particle size distribution and range

Shape category: elongated

Percentile

Percentile 1

Percentile: D10
 Typical value: 17 nm
 Range: > 0 - < 100 nm

Percentile 2

Percentile: D50
 Typical value: < 30 nm
 Range: > 0 - < 100 nm

Percentile 3

Percentile: D90
 Typical value: ca. 107 nm
 Range: > 30 - < 107 nm

Typical length: ca. 300 nm

Range of length: > 100 - < 600 nm

Typical lateral dimension 1: 30 nm

Range of lateral dimension 1: > 17 - < 107 nm

Typical lateral dimension 2: 30 nm

Range of lateral dimension 2: > 17 - < 107 nm

Typical aspect ratio (:1): ca. 10 :1

Range of aspect ratio (:1): >= 6 - <= 35

Additional information: Due to the agglomeration the dimensions and aspect ratio are determined manually by using the TEM images and therefore are approximate values.

Fraction of constituent particles in the size range 1-100 nm: > 0 - < 80 %

Crystallinity

Structures

Structure: crystalline
 Name: Barium carbonate BM020
 Pure structure: yes
 Typical composition: 100 %
 Crystal system: orthorhombic
 Bravais lattice: primitive orthorhombic


Specific surface area

Typical specific surface area: 29.3 m²/g

Range of specific surface area:	> 27 - < 32 m ² /g
Typical volume specific surface area:	126 m ² /cm ³
Range of volume specific surface area:	> 116 - < 138 m ² /cm ³
Skeletal density:	4.31 g/cm ³

Surface functionalisation / treatment

Surface treatment applied: no

Composition 5		Nanoform
State Form:	solid: nanoform	
Constituent 1		
	Reference substance name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate
Characterisation of nanoforms		
Type of information reported:	single nanoform	
Shape		
Shape description		
Shape category:	elongated	
Shape:	rod	
Pure shape:	yes	
Typical composition:	100 %	
Particle size distribution and range		

Particle size distribution and range

Shape category: elongated

Percentile

Percentile 1

Percentile: D10
 Typical value: 22 nm
 Range: > 0 - < 100 nm

Percentile 2

Percentile: D50
 Typical value: < 60 nm
 Range: > 0 - < 100 nm

Percentile 3

Percentile: D90
 Typical value: 280 nm
 Range: > 60 - < 280 nm

Typical length: ca. 400 nm

Range of length: > 150 - < 700 nm

Typical lateral dimension 1: ca. 60 nm

Range of lateral dimension 1: > 22 - < 280 nm

Typical lateral dimension 2: ca. 60 nm

Range of lateral dimension 2: > 22 - < 280 nm

Typical aspect ratio (:1): 7 :1

Range of aspect ratio (:1): >= 3 - <= 30

Additional information: Due to the agglomeration the dimensions and aspect ratio are determined manually by using the TEM images and therefore are approximate values.

Fraction of constituent particles in the size range 1-100 nm: > 0 - < 70 %

Crystallinity


Structures


Structure: crystalline
 Name: Barium carbonate BM040
 Pure structure: yes
 Typical composition: 100 %
 Crystal system: orthorhombic
 Bravais lattice: primitive orthorhombic


Specific surface area

Typical specific surface area: 10 m²/g

Range of specific surface area:	> 5 - < 15 m ² /g
Typical volume specific surface area:	46 m ² /cm ³
Range of volume specific surface area:	> 22 - < 65 m ² /cm ³
Skeletal density:	4.31 g/cm ³
Surface functionalisation / treatment	
Surface treatment applied:	no

Composition 6		
Constituent 1		
	Reference substance name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate


Barium carbonate		
State Form:	solid; bulk	
Constituent 1		
	Reference substance name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate

Composition 8		
State Form:	solid; bulk	
Constituent 1		
	Reference substance name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate

Barium carbonate

State Form: solid; particulate/powder

Constituent 1

	Reference substance name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate

Mixture

State Form: solid; particulate/powder

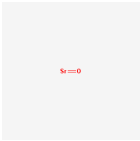
Constituent 1

	Reference substance name:	Barium carbonate
	EC Number:	208-167-3
	EC Name:	Barium carbonate
	CAS Number:	513-77-9
	Molecular formula:	BaCO ₃
	IUPAC Name:	barium carbonate

Constituent 2

	Reference substance name:	Cerium dioxide
	EC Number:	215-150-4
	EC Name:	Cerium dioxide
	CAS Number:	1306-38-3
	Molecular formula:	CeO ₂
	IUPAC Name:	Cerium dioxide

Constituent 3

	Reference substance name:	Strontium oxide
	EC Number:	215-219-9
	EC Name:	Strontium oxide
	CAS Number:	1314-11-0
	Molecular formula:	SrO
	IUPAC Name:	Strontium oxide

Barium Carbonate

State Form: solid; particulate/powder

Constituent 1Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

Barium Carbonate

State Form: solid: bulk

Constituent 1Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

208-167-3**Constituent 1**Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

Barium carbonate**Constituent 1**Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

barium carbonate

Constituent 1Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

Barium Carbonate**Constituent 1**Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

0052 Barium Carbonate**Constituent 1**Ba²⁺

Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

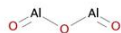
Barium carbonate**Impurity**

Degree of purity: ca. 99.615 % (w/w)

Constituent 1Ba²⁺

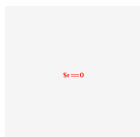
Reference substance name:	Barium carbonate
EC Number:	208-167-3
EC Name:	Barium carbonate
CAS Number:	513-77-9
Molecular formula:	BaCO ₃
IUPAC Name:	barium carbonate

Impurity 1



Reference substance name:	Aluminium oxide
EC Number:	215-691-6
EC Name:	Aluminium oxide
CAS Number:	1344-28-1
Molecular formula:	Al ₂ O ₃
IUPAC Name:	Aluminium oxide

Impurity 2



Reference substance name:	Strontium oxide
EC Number:	215-219-9
EC Name:	Strontium oxide
CAS Number:	1314-11-0
Molecular formula:	SrO
IUPAC Name:	Strontium oxide

Composition(s) generated upon use

Other types of composition(s)

Information on Registered Substances comes from registration dossiers which have been assigned a registration number. The assignment of a registration number does however not guarantee that the information in the dossier is correct or that the dossier is compliant with Regulation (EC) No 1907/2006 (the REACH Regulation). This information has not been reviewed or verified by the Agency or any other authority. The content is subject to change without prior notice.

Reproduction or further distribution of this information may be subject to copyright protection. Use of the information without obtaining the permission from the owner(s) of the respective information might violate the rights of the owner.



SCHEDA DI SICUREZZA

ai sensi dei regolamenti UE 878/2020, 1907/2006 e 1272/2008

1. IDENTIFICAZIONE DELLA SOSTANZA/MISCELA E DELLA SOCIETA'/IMPRESA

- 1.1 Identificatore del prodotto: Apportatore di Zolfo e coagulante per impianti di depurazione
- 1.1.1 Nome commerciale: **TRUFFLE**
- 1.1.2 Posizione REACH: Esente da registrazione ai sensi art.2, comma7, lettera d) Regolamento 1907/2006 CE – miscela di sostanze recuperate
- 1.2 Usi identificati pertinenti della sostanza o della miscela e usi consigliati:
Materia Prima Seconda, prodotto ad elevato tenore solfatico e carbonatico.
Il materiale è commercializzato sfuso in forma granulare.
Impiego come apportatore di zolfo per cementifici e come agente depurante per acque reflue.
Usi differenti da quello raccomandato devono essere valutati caso per caso.
SU13: Fabbricazione di altri prodotti della lavorazione di minerali non metalliferi, ad esempio intonaci, cemento.
SU23: Elettricità, vapore, gas, fornitura di acqua e trattamento delle acque reflue
- 1.3 Informazioni sul fornitore della scheda di dati di sicurezza:

Ecoimpianti C.R.V. S.r.l.
Via Learco Guerra, snc
14100 Asti (AT)
info@ecoimpianticrv.it
- 1.3.1 Persona competente responsabile della scheda di dati di sicurezza:

Responsabile impianto
amministrazione@ecoimpianticrv.it
- 1.4 Numero telefonico di emergenza: Tel: 0141 477207

2. IDENTIFICAZIONE DEI PERICOLI

- 2.1 Classificazione della sostanza o della miscela
Definizione del prodotto: sostanza recuperata
Il prodotto è stato classificato sulla base delle attuali conoscenze tecniche sulla composizione in conformità al Regolamento 1272/2008.
Classificazione secondo Regolamento (EC) No 1272/2008 e ss.mm.ii.:

Il prodotto è classificato come NON pericoloso.

2.2 Elementi dell'etichetta:

Etichettatura secondo il Regolamento (CE) n. 1272/2008 e ss.mm.ii.

Pittogramma: NESSUNO

Avvertenza: NESSUNA

Indicazioni di pericolo: NESSUNA

Consigli di prudenza: NESSUNO

2.3 Altri pericoli:

Il prodotto è in forma pulverulenta e può determinare irritazione meccanica delle vie respiratorie e per gli occhi.

La presenza di minerali in forma cristallina e altri residui di minerali duri insolubili può determinare un rischio di abrasione della cornea.

3. COMPOSIZIONE/INFORMAZIONI SUGLI INGREDIENTI

3.1 Sostanza

Il prodotto è identificabile come una sostanza ai sensi del Reg. UE 1907/2006 e ss.mm.ii.

Denominazione	Concentrazione	Classificazione CLP
Solfato di Calcio Diidrato (CaSO ₄ *2H ₂ O) CAS: 10101-41-4 EINECS: 231-900-4	10-30%	Forma Minerale Non pericoloso
Barite (BaSO ₄) CAS: 7727-43-7 EINECS: 231-784-4	15-25%	Forma Minerale Non pericoloso
Witherite (BaCO ₃) CAS: 513-77-9 EINECS: 208-167-3	20-30%	Forma Minerale Non pericoloso
Calcite (CaCO ₃) CAS: 471-34-1 EINECS: 207-439-9	5-15%	Forma Minerale Non pericoloso

I componenti la miscela sono in forma minerale cristallina e sono sostanze non pericolose. La miscela non contiene sostanze pericolose in concentrazioni superiori alle soglie significative ai sensi del Regolamento 878/2020 e del Regolamento CLP 1272/2008.

Altre sostanze presenti come impurezze possono essere: carbonati di calcio e magnesio, silice in forma non cristallina, gesso in forma amorfa, ossidi di ferro e alluminio, solfato di calcio emiidrato, solfato di calcio anidro.

3.2 Informazioni aggiuntive: La sostanza non è presente in candidate list e non è una sostanza estremamente preoccupante SVHC. Non risulta applicabile la qualificazione a PBT e vPvB.

4. MISURE DI PRIMO SOCCORSO

4.1 Descrizione delle misure di primo soccorso:

In caso di contatto con la pelle:	Cambiarsi gli abiti Lavare con acqua e sapone
In caso di contatto con gli occhi:	Risciacquarli con acqua per almeno 10 minuti tenendo aperte le palpebre. <u>Impedire al soggetto di sfregarsi le palpebre</u> : rischio di abrasione della cornea. In caso di irritazione persistente consultare un oftalmologo.
In caso di ingestione:	Se accusa malesseri consultare un medico mostrando la scheda di sicurezza o l'etichetta del preparato.
In caso di inalazione:	Areare l'ambiente. Rimuovere subito il paziente dall'ambiente contaminato e tenerlo a riposo in ambiente areato. In caso di malessere consultare un medico.

4.2 Principali sintomi ed effetti, sia acuti che ritardati:

Non sono disponibili altre informazioni

4.3 Indicazioni dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali:

In caso di malessere a seguito di contatto con il prodotto, consultare immediatamente un medico (mostrare le istruzioni per l'uso o la scheda di sicurezza).
Trattamento: Osservazione (ingestione), a discrezione del medico per altre vie di esposizione.

4.3.1 Trattamento:

Nessuno specifico per la miscela in esame. In caso di malore consultare un medico.

5. MISURE DI LOTTA ANTINCENDIO

5.1 Mezzi di estinzione:

Mezzi di estinzione idonei:	Schiuma Biossido di carbonio (CO ₂) Polvere ABC Acqua nebulizzata Acqua a getti
-----------------------------	---

Mezzi di estinzione che non devono essere utilizzati per ragioni di sicurezza:
Nessuno in particolare

5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela:

Il prodotto non è infiammabile e non dà origine ad atmosfere esplosive.
La decomposizione termica, ad alta temperatura, può sviluppare acido solfidrico (T>1200°C) e anidride carbonica (T>800°C), gas asfissianti e irritanti.

Raccogliere separatamente l'acqua contaminata utilizzata per estinguere l'incendio. Non scaricarla nella rete fognaria.

Se fattibile sotto il profilo della sicurezza, spostare dall'area di immediato pericolo i contenitori non danneggiati.

5.3 Raccomandazioni per gli addetti all'estinzione degli incendi:

Impiegare protezioni per le vie respiratorie. Utilizzare vestiario per la protezione dal calore.

6. MISURE IN CASO DI RILASCIO ACCIDENTALE

6.1 Precauzioni personali, dispositivi di protezione e procedure di emergenza:

Il soggetto che interviene dovrà utilizzare guanti, abbigliamento da lavoro e occhiali. Si rimanda al paragrafo 8 per gli specifici DPI da utilizzare. Il soggetto che non interviene dovrà allontanarsi e riparare in luogo adeguatamente sicuro e protetto dal rilascio accidentale.

6.2 Precauzioni ambientali:

Evitare che il preparato diffonda nel suolo/sottosuolo. Raccogliere il prodotto possibilmente a secco, all'evenienza pre-umidificare onde evitare la dispersione di polvere. In caso di dispersione contenere ed evitare che possa diffondersi in corsi d'acqua superficiali, caditoie di raccolta di acque piovane o scarichi. Trattenere l'acqua di lavaggio contaminata ed eliminarla come rifiuto. Se il prodotto dilavato è defluito in corso d'acqua o in rete fognaria, avvisare le autorità competenti.

6.3 Metodi e materiali per il contenimento e per la bonifica:

Lavare con abbondante acqua la zona e i materiali interessati: raccogliere le acque di lavaggio e smaltirle come rifiuto.

6.4 Riferimento ad altre sezioni:

Vedi anche paragrafi 7, 8 e 13.

7. MANIPOLAZIONE E IMMAGAZZINAMENTO

7.1 Precauzioni per la manipolazione sicura:

In caso di operazioni di trasferimento non utilizzare contenitori vuoti prima che siano stati puliti e assicurarsi che nei contenitori non vi siano residui di materiali incompatibili.

Gli indumenti contaminati devono essere sostituiti prima di accedere alle aree da pranzo. Durante il lavoro non mangiare né bere. Si rimanda al paragrafo 8 per i dispositivi di protezione raccomandati.

7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità

Evitare la dispersione di polveri. Mantenere l'ambiente ventilato. Conservare in luogo asciutto e possibilmente coperto. Tenere lontano da alimenti.

Materie incompatibili:	Acidi forti.
Azioni vietate:	Non miscelare con acidi forti.
Indicazioni per i locali:	Nessuna in particolare.

7.3 Usi finali particolari:

SU13: Fabbricazione di altri prodotti della lavorazione di minerali non metalliferi, ad esempio intonaci, cemento.
SU 23: Depurazione delle acque reflue.
Uso tal quale.

7.3.1 Trasporto:

Vedi par.14. In caso di trasporto in quantità limitate o esenti adottare le dovute precauzioni di stivaggio.

7.3.2 Materiali incompatibili:

Non vi sono evidenze di materiali incompatibili con il prodotto.

7.3.3 Materiali compatibili:

Il materiale può essere introdotto in contenitori realizzati in materiali metallici, vetro o in materiali plastici se compatibili.

8. CONTROLLI DELL'ESPOSIZIONE / DELLA PROTEZIONE INDIVIDUALE

8.1 Parametri di controllo:

Valori limite di esposizione professionale:

SOSTANZA	TWA - 8h	STEL - 15min	Fonte
Polveri inalabili	10 mg/m ³	-	TLV ACGIH

8.2 Controlli dell'esposizione

Protezione degli occhi:	Utilizzare occhiali protettivi [EN 166].
Protezione della pelle:	Utilizzare indumenti di lavoro, maniche e pantaloni lunghi.
Protezione delle mani:	Utilizzare guanti protettivi che garantiscano una protezione adeguata.
Protezione respiratoria:	Non richiesta durante il normale uso. Indossare semimaschera o facciale filtrante FFP2 solo in presenza di grandi quantità di polvere.
Rischi termici:	Sviluppo di gas di decomposizione ad alta temperatura, anidride solforica e biossido di carbonio.

Utilizzare un autorespiratore o una maschera semifacciale o pienofacciale con filtri tipo ABEK [EN 371].

Controlli dell'esposizione ambientale: Verifica della concentrazione in ambiente di lavoro secondo norma UNI EN 689:2019.

9. PROPRIETA' FISICHE E CHIMICHE

9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali

Aspetto e colore	Solido, forma talco/granulare. Colore bianco, grigio, beige.
Odore	Inodore
Soglia di odore	N.D.
pH (estratto acquoso)	N.A.
Punto di fusione	N.D.
Punto di congelamento	N.D.
Punto di ebollizione iniziale / intervallo di ebollizione	N.D.
Infiammabilità solidi/gas	Non infiammabile
Limite superiore/inferiore d'infiammabilità o esplosione	N.A.
Densità dei vapori	N.A.
Peso specifico rel. Aria	N.D.
Punto di infiammabilità	Non infiammabile
Velocità di evaporazione	N.D.
Pressione di vapore	N.D.
Densità	N.D.
Idrosolubilità (a 25°C)	2 g/l (solfato di calcio) 0,014 g/l (carbonato di calcio) 0,024 g/l (carbonato di bario) 0,0024 g/l (solfato di bario)
Liposolubilità	N.D.
Coefficiente di ripartizione n-ottanolo/acqua (log Pow)	N.D.
Temperatura di autoaccensione	N.D.
Temperatura di decomposizione	N.D.
Viscosità	N.D.
Proprietà esplosive	Non esplosivo
Proprietà comburenti	Non comburente

9.2 Altre informazioni

Miscibilità	Immiscibile con acqua e con i più comuni solventi organici
Liposolubilità	N.D.
Conducibilità	Polvere non conduttiva
Proprietà caratteristiche dei gruppi di sostanze	N.A.

10. STABILITA' E REATTIVITA'

10.1 Reattività: Stabile in condizioni normali

10.2 Stabilità chimica:	Stabile in condizioni normali
10.3 Possibilità di reazioni pericolose:	Può reagire violentemente a contatto con acidi forti.
10.4 Condizioni da evitare:	Contatto con acidi forti.
10.5 Materiali incompatibili:	Acidi forti (Ad es. HCl, HNO ₃ , H ₂ SO ₄)
10.6 Prodotti di decomposizione pericolosi:	diossido di carbonio, anidride solforosa, ossido di calcio

11. INFORMAZIONI TOSSICOLOGICHE

11.1 Informazioni sulle classi di pericolo definite nel regolamento (CE) n. 1272/2008:

Tossicità acuta:	Componenti tossicologiche rilevanti risultano essere: - Solfato di calcio: LD50 orale > 1500 mg/kg (ratto) LD50 inalatoria >2,5 mg/l (ratto)
Irritabilità primaria:	L'esposizione può provocare irritazione meccanica alla pelle e agli occhi.
Sensibilizzazione:	Nessun effetto conosciuto
Mutagenicità:	Non mutageno
Cancerogenicità:	I rischi cronici per la salute sono associati alle particelle respirabili di 3-4 µm su periodi di tempo prolungati. Al momento esiste una comprensione limitata dei meccanismi di tossicità del quarzo, inclusi quelli per la cancerogenesi ai polmoni. Sono necessari ulteriori studi per determinare se l'attività di trasformazione cellulare del quarzo è correlata al suo potenziale cancerogeno. Il quarzo presente come impurezza nel materiale è di origine minerale, naturalmente presente nel gesso di cava, sostanza non pericolosa ai sensi del Regolamento CLP 1272/2008.
Tossicità riproduttiva:	Non teratogeno
Tossicità specifica per la miscela per organi bersaglio (STOT) esposizione singola:	Non stabilita
Tossicità specifica per la miscela per organi bersaglio (STOT) esposizione ripetuta:	Non stabilita
Pericolo in caso di esposizione:	Irritazione meccanica delle vie respiratorie e degli occhi

11.2 Informazioni su altri pericoli

12. INFORMAZIONI ECOLOGICHE

12.1 Tossicità

Utilizzare secondo le buone pratiche lavorative, evitando di disperdere il prodotto nell'ambiente.
Non disperdere nell'ambiente.

Non sono disponibili informazioni sulla eco-tossicità della miscela in quanto tale.

I singoli componenti non presentano potenziale ecotossico.

- 12.2 Persistenza e degradabilità: Non attinente: materiale inorganico.
- 12.3 Potenziale di bioaccumulo: Non sono disponibili informazioni sulla miscela
- 12.4 Mobilità nel suolo: Prodotto con solubilità trascurabile per cui si prevede una mobilità nel suolo poco significativa. Qualsiasi indagine avrebbe comunque una valenza scarsa vista la diffusa presenza nel suolo di ioni calcio e solfato
- 12.5 Risultati della valutazione PBT e vPvB
Sostanze vPvB: Nessuna
Sostanze PBT: Nessuna
- 12.6 Proprietà di interferenza con il sistema endocrino
- 12.7 Altri effetti avversi: Nessuno

13. CONSIDERAZIONI SULLO SMALTIMENTO

- 13.1 Metodi di trattamento dei rifiuti:
- Operare secondo le vigenti disposizioni nazionali e internazionali in materia di smaltimento rifiuti.
Il rifiuto è smaltito in relazione al ciclo produttivo da cui si produce.
Gli imballaggi vuoti possono essere smaltiti con il codice CER per imballaggi 15.01.XX in relazione alla tipologia d'imballaggio.
Stoccare il rifiuto in contenitori a tenuta stagna in modo da evitare le fuoriuscite e le lisciviazioni di eventuali composti solubili nell'acqua.
Imballi sporchi: non riutilizzare gli imballi per altri usi.

14. INFORMAZIONI SUL TRASPORTO

- 14.1 Numero ONU e numero ID: Merce non sottoposta ai Regolamenti ADR/ADN/RID.
- 14.2 Designazione ufficiale ONU di trasporto: N.A.
- 14.3 Classi di pericolo connesso al trasporto: N.A.
- 14.4 Gruppo d'imballaggio: N.A.
- 14.5 Pericoli per l'ambiente: N.A.
- 14.6 Precauzioni speciali per gli utilizzatori
- 14.7 Trasporto marittimo alla rinfusa conformemente agli atti dell'IMO: N.A.

15. INFORMAZIONI SULLA REGOLAMENTAZIONE

- 15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela:

Il materiale è classificato ai sensi del regolamento CE 1272/2008.

Alcune normative applicabili al prodotto
Italia D.Lgs. 81/08 (Testo Unico Sicurezza)
Italia D.Lgs. 152/06 (Testo Unico ambiente)
EU Regolamento (CE) n. 1907/2006
EU Regolamento (CE) n. 1272/2008
EU Regolamento (CE) n. 790/2009
EU Regolamento (UE) n. 1357/2014
EU Regolamento (UE) n. 997/2017

Ove applicabili si faccia riferimento alle seguenti normative:

D.Lgs. 105/15 e s.m.i. (Direttiva Seveso ter)
Reg. (CE) 689/2008

15.2 Valutazione della sicurezza chimica: No

16. ALTRE INFORMAZIONI

Testo delle frasi utilizzate al paragrafo 3: N.A.

Testo delle indicazioni d'uso utilizzate al paragrafo 1:

SU13 – Fabbricazione di prodotti a base cemento
SU23 – Trattamento delle acque reflue

Legenda delle semplificazioni utilizzate:

N.A.: Non applicabile
N.D.: Non disponibile

Principali fonti bibliografiche:

1. Regolamento (CE) 1272/2008 del Parlamento Europeo (GHS)
2. Regolamento (CE) 1907/2006 del Parlamento Europeo (REACH)
3. Regolamento (CE) 878/2020 del Parlamento Europeo
4. Niosh - Registry of Toxic Effects of Chemical Substances
5. ACGIH - Threshold Limit Values – 2020 edition
6. ADR regulation
7. IMDG regulation
8. IATA regulation

Principali definizioni:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: Accordo europeo relativo al trasporto internazionale stradale di merci pericolose
CAS: Chemical Abstracts Service (divisione della American Chemical Society)
CLP: Classificazione, etichettatura, imballaggio
DNEL: Livello derivato senza effetto
EINECS: Inventario europeo delle sostanze chimiche europee esistenti in commercio
GHS: Sistema globale armonizzato di classificazione e di etichettatura dei prodotti chimici
IATA: Associazione per il trasporto aereo internazionale
IATA-DGR: Regolamento sulle merci pericolose della "Associazione per il trasporto aereo internazionale" (IATA)
ICAO: Organizzazione internazionale per l'aviazione civile
ICAO-TI: Istruzioni tecniche della "Organizzazione internazionale per l'aviazione civile" (ICAO)
IMDG: Codice marittimo internazionale per le merci pericolose
INCI: Nomenclatura internazionale degli ingredienti cosmetici

EC50 (48hr): Concentrazione alla quale si ottiene un'immobilità del 50% della popolazione di test per esposizione di 48 ore.

LC50: Concentrazione letale per il 50 per cento della popolazione di test

LD50: Dose letale per il 50 per cento della popolazione di test

PNEC: Concentrazione prevista senza effetto

RID: Regolamento riguardante il trasporto internazionale di merci pericolose per via ferroviaria

STEL: Limite d'esposizione a breve termine

STOT: Tossicità organo-specifica

TLV: Valore limite di soglia

TWA-TLV: Valore limite di soglia per la media pesata su 8 ore (ACGIH Standard)

Questa scheda di sicurezza annulla e sostituisce ogni edizione precedente.

NOTE:

Le informazioni ivi contenute si basano sulle nostre conoscenze alla data sopra riportata, sono riferite unicamente al prodotto indicato e non costituiscono garanzia di particolari qualità.

Poiché la gestione del prodotto non cade sotto il nostro diretto controllo, è obbligo dell'utilizzatore osservare, sotto la propria responsabilità, le leggi e le disposizioni vigenti in materia di ambiente, trasporti, igiene e sicurezza. Non si assumono responsabilità per usi impropri.

L'utilizzatore è tenuto ad assicurarsi dell'idoneità e completezza di tali informazioni in relazione all'utilizzo specifico che ne deve fare.