SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2020/878

Nyrstar Gypsum

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Nyrstar Gypsum
Registration number REACH : 01-2119444918-26-0131 (Nyrstar Budel BV)
Product type REACH : Substance/mono-constituent
CAS number : 10101-41-4
EC number : 231-900-3
Molecular mass : 172.17 g/mol
Formula : CaSO4.2H2O

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant identified uses

Chemical raw material

1.2.2 Uses advised against

No uses advised against known

1.3. Details of the supplier of the safety data sheet

Supplier of the safety data sheet

Nyrstar Budel B.V. on behalf of Nyrstar Sales & Marketing A.G.
Hoofdstraat 1
6024 AA Budel-Dorplein
☎ +32 14 44 96 80
🖷 +32 14 44 95 52
infoSDS@nyrstar.com

Manufacturer of the product

Nyrstar Sales & Marketing SA
1 Rue de Jargonnant
CH-1207 Geneva
infoSDS@nyrstar.com

1.4. Emergency telephone number

24h/24h (Telephone advice: English, French, German, Dutch) :
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.2. Label elements

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

2.3. Other hazards

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances

SECTION 3: Composition/information on ingredients

3.1. Substances

Name REACH Registration No	CAS No EC No	Conc. (C)	Classification according to CLP	Note	Remark	M-factors and ATE
calcium sulfate, dihydrate 01-2119444918-26	10101-41-4 231-900-3	C≥98 %		(2)	Constituent	
zinc hydroxide 01-2119484821-33	20427-58-1 243-814-3	C<0.9 %	Aquatic Acute 1; H400 Aquatic Chronic 2; H411	(1)	Impurity	M: 10 (Acute, ECHA (registration dossier))

(1) For H- and EUH-statements in full: see section 16
(2) Substance with a Community workplace exposure limit

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

General:
If you feel unwell, consult a doctor/medical service.

After inhalation:
Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:
If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water.

After eye contact:
Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:
Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

4.2. Most important symptoms and effects, both acute and delayed

4.2.1 Acute symptoms

After inhalation:
EXPOSURE TO HIGH CONCENTRATIONS: Coughing. Irritation of the nasal mucous membranes.

After skin contact:
No effects known.

After eye contact:
Slight irritation.

After ingestion:
No effects known.

4.2.2 Delayed symptoms
No effects known.

4.3. Indication of any immediate medical attention and special treatment needed

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.1.1 Suitable extinguishing media:
Adapt extinguishing media to the environment for surrounding fires.

5.1.2 Unsuitable extinguishing media:
Not applicable.

5.2. Special hazards arising from the substance or mixture

On burning: release of toxic and corrosive gases/vapours (sulphur oxides) and formation of metal oxides.

5.3. Advice for firefighters

5.3.1 Instructions:
Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:
Gloves (EN 374). Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: self-contained breathing apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

No naked flames. Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

6.1.1 Protective equipment for non-emergency personnel
See section 8.2

6.1.2 Protective equipment for emergency responders
Gloves (EN 374). Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing
See section 8.2

6.2. Environmental precautions

Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.

6.3. Methods and material for containment and cleaning up

Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

6.4. Reference to other sections

See section 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1. Precautions for safe handling

Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:
Storage temperature: < 50 °C. Meet the legal requirements.

7.2.2 Keep away from:
Heat sources, (strong) acids.

7.2.3 Suitable packaging material:
No data available

7.2.4 Non suitable packaging material:
No data available

7.3. Specific end use(s)

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

Belgium

Calcium (sulfate de) (anhydrate, hemihydrate, dihydrate, gypse)	Time-weighted average exposure limit 8 h	10 mg/m³

France

Calcium (sulfate de)	Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative)	10 mg/m³

Germany

Calciumsulfat: Dihydrat (alveolengängige Fraktion)	*vgl. Abschn. IIb*	
Calciumsulfat: Dihydrat	Time-weighted average exposure limit 8 h (MAK)	4 mg/m³ **(1)**
	vgl. Abschn. V f) und g)	
Zink und seine anorganischen Verbindungen	Time-weighted average exposure limit 8 h (MAK)	0.1 mg/m³ **(2)**
	Time-weighted average exposure limit 8 h (MAK)	2 mg/m³ **(3)**

(1) Einatembare Fraktion
(2) Alveolengängige Fraktion; UF: I(4)
(3) Einatembare Fraktion; UF: I(2); Zinkchlorid: Kurzzeitkategorie I(1)

UK

Gypsum	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	10 mg/m³ **(1)**
	Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005))	4 mg/m³ **(2)**

(1) Inhalable dust
(2) Respirable dust

USA (TLV-ACGIH)

Calcium sulfate	Time-weighted average exposure limit 8 h (TLV - Adopted Value)	10 mg/m³ **(1)**

(1) (I): Inhalable fraction

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

Product name	Test	Number
Sulfites, & Sulfates	NIOSH	6004
Zinc & Cpds (as Zn)	NIOSH	7030

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 Threshold values

DNEL/DMEL - Workers

calcium sulfate, dihydrate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	21.17 mg/m³	Anhydrous form
	Acute systemic effects inhalation	5082 mg/m³	Anhydrous form

DNEL/DMEL - General population

calcium sulfate, dihydrate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects inhalation	5.29 mg/m³	Anhydrous form
	Acute systemic effects inhalation	3811 mg/m³	Anhydrous form
	Long-term systemic effects oral	1.52 mg/kg bw/day	Anhydrous form
	Acute systemic effects oral	11.4 mg/kg bw/day	Anhydrous form

PNEC

zinc hydroxide

Compartments	Value	Remark
Fresh water	21.9 µg/l	
Marine water	10.9 µg/l	
STP	152 µg/l	
Fresh water sediment	223.3 mg/kg sediment dw	
Marine water sediment	246.6 mg/kg sediment dw	
Soil	126.3 mg/kg soil dw	

8.1.5 Control banding

If applicable and available it will be listed below.

8.2. Exposure controls

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Respiratory protection not required in normal conditions.

b) Hand protection:

Protective gloves against chemicals (EN 374).

Materials	Remark
nitrile rubber	Good resistance
PVC	Good resistance

c) Eye protection:

Safety glasses (EN 166).

d) Skin protection:

Protective clothing (EN 14605 or EN 13034).

8.2.3 Environmental exposure controls:

See sections 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical form	Moist solid
Colour	White-brown
Odour	Odourless
Odour threshold	Not applicable
Melting point	No data available in the literature
Boiling point	No data available in the literature
Flammability	Not classified as flammable
Explosion limits	Not applicable
Flash point	Not applicable (solid)
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available in the literature
pH	3 - 5
Kinematic viscosity	Not applicable (solid)
Solubility	Water ; insoluble
Log Kow	Not applicable (inorganic)
Vapour pressure	< 0.1 hPa ; 20 °C
Absolute density	No data available in the literature
Relative density	No data available in the literature
Relative vapour density	Not applicable (solid)
Particle size	No data available in the literature

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity
Acid reaction.

10.2. Chemical stability
No data available.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
Precautionary measures
Keep away from naked flames/heat.

10.5. Incompatible materials
(strong) acids.

10.6. Hazardous decomposition products
On burning: release of toxic and corrosive gases/vapours (sulphur oxides) and formation of metal oxides.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.1.1 Test results

Acute toxicity

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 420	> 2000 mg/kg bw		Rat (female)	Experimental value	Hydrate form
Inhalation (dust)	LC50	OECD 403	> 3.26 mg/l air	4 h	Rat (male / female)	Experimental value	Hydrate form

zinc hydroxide

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 423	> 2000 mg/kg bw		Rat (female)	Experimental value	
Dermal						Data waiving	
Inhalation (dust)	LC50	Equivalent to OECD 403	> 5.7 mg/l	4 h	Rat (male / female)	Experimental value of similar product	

Conclusion
Not classified for acute toxicity

Corrosion/irritation

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405		24; 48; 72 hours	Rabbit	Experimental value	Anhydrous form
Skin	Not irritating	OECD 404	4 h	72 hours	Rabbit	Experimental value	Anhydrous form

zinc hydroxide

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Not irritating	OECD 405	24 h	24; 48; 72 hours	Rabbit	Experimental value of similar product	
Not applicable (in vitro test)	Not irritating	OECD 439			Reconstructed human epidermis	Experimental value	

Conclusion
Not classified as irritating to the skin
Not classified as irritating to the eyes
Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406			Guinea pig (male)	Experimental value	Hydrate form

zinc hydroxide

Route of exposure	Result	Method	Exposure time	Observation time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 406			Guinea pig (male / female)	Experimental value of similar product	

Conclusion

Not classified as sensitizing for skin

Not classified as sensitizing for inhalation

Specific target organ toxicity

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral	NOAEL	OECD 422	100 mg/kg bw/day	Blood (no effect)	35 day(s)	Rat (male)	Experimental value	Hydrate form
Oral	LOAEL	OECD 422	300 mg/kg bw/day	Blood (change in the haemogramme/blood composition)	35 day(s)	Rat (male)	Experimental value	Hydrate form

zinc hydroxide

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (stomach tube)	NOAEL	OECD 408	31.25 mg/kg bw/day	No effect	90 day(s)	Rat (male / female)	Experimental value of similar product	
Dermal	Dose level	OECD 411	1000 mg/kg bw/day	No effect	90 day(s)	Rat (male / female)	Experimental value of similar product	
Inhalation (aerosol)	NOAEC	OECD 412	0.47 mg/m³ air	No effect	4 weeks (6h / day, 5 days / week)	Rat (male / female)	Experimental value of similar product	

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	OECD 471	Bacteria (S. typhimurium and E. coli)	No effect	Experimental value	Hydrate form
Negative with metabolic activation, negative without metabolic activation	OECD 476	Mouse (lymphoma L5178Y cells)	No effect	Experimental value	Hydrate form

zinc hydroxide

Result	Method	Test substrate	Effect	Value determination	Remark
Negative with metabolic activation, negative without metabolic activation	Equivalent to OECD 471	Bacteria (S. typhimurium and E. coli)		Experimental value	

Mutagenicity (in vivo)

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Oral (diet))	OECD 474		Mouse (male)	Blood (no effect)	Experimental value	Hydrate form

zinc hydroxide

Result	Method	Exposure time	Test substrate	Organ/Effect	Value determination	Remark
Negative (Inhalation (aerosol))	OECD 474	2 weeks (6h / day, 5 days / week)	Rat (male / female)	No effect	Experimental value of similar product	

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (diet)	NOAEL	Carcinogenic toxicity study	256 mg/kg bw/day	No carcinogenic effect	104 weeks (daily)	Rat (male)	Experimental value of similar product	
Oral (diet)	NOAEL	Carcinogenic toxicity study	284 mg/kg bw/day	No carcinogenic effect	104 weeks (daily)	Rat (female)	Experimental value of similar product	

zinc hydroxide

Route of exposure	Parameter	Method	Value	Organ/Effect	Exposure time	Species	Value determination	Remark
Oral (drinking water)	NOAEL	Carcinogenic toxicity study	> 22000 mg/l	No carcinogenic effect	52 weeks (daily)	Mouse (male / female)	Experimental value of similar product	

Conclusion

Not classified for carcinogenicity

Reproductive toxicity

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	1600 mg/kg bw/day	10 days (gestation, daily)	Rat	General (no effect)	Experimental value	Anhydrous form
Maternal toxicity (Oral (stomach tube))	NOAEL	Equivalent to OECD 414	1600 mg/kg bw/day	10 days (gestation, daily)	Rat	No effect	Experimental value	Anhydrous form
Effects on fertility (Oral (stomach tube))	NOAEL	OECD 422	1000 mg/kg bw/day		Rat (male / female)	No effect	Experimental value	Hydrate form

zinc hydroxide

Category	Parameter	Method	Value	Exposure time	Species	Effect	Value determination	Remark
Developmental toxicity (Inhalation (aerosol))	NOAEC	OECD 414	7.5 mg/m³	14 days (6h / day)	Rat (female)	No effect	Experimental value of similar product	
Maternal toxicity (Inhalation (aerosol))	NOAEC	OECD 414	1.5 mg/m³ air	14 days (6h / day)	Rat	No effect	Experimental value of similar product	
Effects on fertility (Oral (stomach tube))	NOAEL	Equivalent to OECD 416	7.5 mg/kg bw/day		Rat (male / female)	No effect	Experimental value of similar product	

Conclusion

Not classified for reprotoxic or developmental toxicity

Aspiration hazard

Nyrstar Gypsum

Not classified for aspiration toxicity

Toxicity other effects

Nyrstar Gypsum

No (test)data available

Chronic effects from short and long-term exposure

Nyrstar Gypsum

No effects known.

11.2. Information on other hazards

No evidence of endocrine disrupting properties

SECTION 12: Ecological information

12.1. Toxicity

Nyrstar Gypsum

No (test)data available

calcium sulfate, dihydrate

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		2980 mg/l	96 h	Lepomis macrochirus			Anhydrous form

zinc hydroxide

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		0.50 mg/l - 0.78 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Read-across; Zinc ion
Acute toxicity crustacea	EC50	EPA 600/4-85/013	0.86 mg/l	48 h	Daphnia magna	Static system	Fresh water	Read-across; Zinc ion
Toxicity algae and other aquatic plants	IC50	OECD 201	0.14 mg/l	72 h	Pseudokirchneriella subcapitata	Static system	Fresh water	Read-across; Zinc ion
	EC10		0.65 mg/l	48 h	Chlorella sp.			Literature study; Zinc ion
Long-term toxicity fish	NOEC		1.2 mg/l		Cyprinus carpio			Literature study; Zinc ion
Long-term toxicity aquatic crustacea	NOEC		0.72 mg/l		Invertebrata			Literature study; Zinc ion
Toxicity aquatic micro-organisms	IC50	ISO 9509:2006	0.35 mg/l	4 h	Activated sludge	Static system	Fresh water	Experimental value; Zinc ion

M-factor of this substance is debatable as it does not correspond to the conclusion from the test

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

12.2. Persistence and degradability

Water

Biodegradability: not applicable

12.3. Bioaccumulative potential

Nyrstar Gypsum

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (inorganic)			

calcium sulfate, dihydrate

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

zinc hydroxide

BCF other aquatic organisms

Parameter	Method	Value	Duration	Species	Value determination
BCF		≤ 28960; Dry weight	28 day(s)	Palaemon elegans	Read-across

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable (inorganic)			

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

zinc hydroxide

Percent distribution

Method	Fraction air	Fraction biota	Fraction sediment	Fraction soil	Fraction water	Value determination
Fugacity Model Level III	1.1E-8 %		0.072 %	74 %	26 %	Calculated value

Conclusion

No (test)data on mobility of the substance available

12.5. Results of PBT and vPvB assessment

The criteria of PBT and vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006 do not apply to inorganic substances.

12.6. Endocrine disrupting properties

No evidence of endocrine disrupting properties

12.7. Other adverse effects

Nyrstar Gypsum

Greenhouse gases

Not included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

Water ecotoxicity pH

pH shift

zinc hydroxide

Groundwater

Groundwater pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1. Waste treatment methods

13.1.1 Provisions relating to waste

European Union

Can be considered as non hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

17 08 02 (gypsum-based construction material: gypsum-based construction materials other than those mentioned in 17 08 01). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

Remove waste in accordance with local and/or national regulations. Do not discharge into drains or the environment. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

No data available

SECTION 14: Transport information

Road (ADR), Rail (RID), Inland waterways (ADN), Sea (IMDG/IMSBC), Air (ICAO-TI/IATA-DGR)

14.1. UN number/ID number

Transport	Not subject

14.2. UN proper shipping name

14.3. Transport hazard class(es)

Hazard identification number	
Class	
Classification code	

14.4. Packing group

Packing group	
Labels	

14.5. Environmental hazards

Environmentally hazardous substance mark	no

14.6. Special precautions for user

Special provisions	
Limited quantities	

14.7. Maritime transport in bulk according to IMO instruments

Annex II of MARPOL 73/78	Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European legislation:

VOC content Directive 2010/75/EU

VOC content	Remark
	Not applicable (inorganic)

Directive 2012/18/EU (Seveso III)

Not subject to registration according to Directive 2012/18/EU (Seveso III)

National legislation Belgium

No data available

National legislation The Netherlands

Waterbezwaarlijkheid	A (2); Algemene Beoordelingsmethodiek (ABM)

National legislation France

No data available

National legislation Germany

WGK	1; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017
TA-Luft	5.2.1

National legislation Austria

No data available

National legislation United Kingdom

No data available

Other relevant data

No data available

15.2. Chemical safety assessment

A chemical safety assessment has been performed.

SECTION 16: Other information

Full text of any H- and EUH-statements referred to under section 3:

H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

(*)	INTERNAL CLASSIFICATION BY BIG
ADI	Acceptable daily intake
AOEL	Acceptable operator exposure level
ATE	Acute Toxicity Estimate
BCF	Bioconcentration Factor
BEI	Biological Exposure Indices
CLP (EU-GHS)	Classification, labelling and packaging (Globally Harmonised System in Europe)
DMEL	Derived Minimal Effect Level
DNEL	Derived No Effect Level
EC10	Effect Concentration 10 %
EC50	Effect Concentration 50 %
ErC50	EC50 in terms of reduction of growth rate
GLP	Good Laboratory Practice
LC0	Lethal Concentration 0 %
LC50	Lethal Concentration 50 %
LD50	Lethal Dose 50 %
LOAEC/LOAEL	Lowest Observed Adverse Effect Concentration/Lowest Observed Adverse Effect Level
NOAEC/NOAEL	No Observed Adverse Effect Concentration/No Observed Adverse Effect Level
NOEC/NOEL	No Observed Effect Concentration/No Observed Effect Level
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative & Toxic
PNEC	Predicted No Effect Concentration
STP	Sludge Treatment Process
vPvB	very Persistent & very Bioaccumulative

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.