MED2-4102

Safety Data Sheet

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Revision Date: 07/01/2022 Date of Issue: 15/08/2013 Version: 4.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Form	Mixture
Product Name	MED2-4102
Synonyms	Barium Sulfate Masterbatch

1.2. Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

1.2.1. Relevant Identified Uses

Use of the Substance/Mixture	For professional use only

1.2.2. Uses Advised Against

Uses Advised Against	No additional information available

1.3. Details of the Supplier of the Safety Data Sheet

NuSil Technology Europe
1198 Avenue Maurice Donat
Le Natura Bt. 2
06250 Mougins
France
+33 4 92 96 93 31
ehs@nusil.com
www.nusil.com

1.4. Emergency Telephone Number

Emergency Number	+1 703-527-3887 CHEMTREC (International and Maritime) 800-424-9300 CHEMTREC (in US) +(44)-870-8200418 +(353)-19014670

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification According to Regulation (EC) No. 1272/2008

Aquatic Chronic 2	H411

Full text of hazard classes, H- and EUH-statements: see section 16

2.2. Label Elements

Labelling According to Regulation (EC) No. 1272/2008 [CLP]

Hazard Pictograms (CLP) :

GHS09

Signal Word (CLP) : -

Hazard Statements (CLP) : H411 - Toxic to aquatic life with long lasting effects.

Precautionary Statements (CLP) : P273 - Avoid release to the environment.
P391 - Collect spillage.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

Component	
Octamethylcyclotetrasiloxane (556-67-2)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets the vPvB criteria of REACH regulation, annex XIII
Decamethylcyclopentasiloxane (541-02-6)	This substance meets the vPvB criteria of REACH regulation, annex XIII
Dodecamethylcyclohexasiloxane (540-97-6)	This substance meets the vPvB criteria of REACH regulation, annex XIII

The substance/mixture does not contain substance(s) equal to or greater than 0.1% by weight that are present in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product Identifier	%	Classification According to Regulation (EC) No. 1272/2008
Barium sulfate	(CAS-No.) 7727-43-7 (EC-No.) 231-784-4	70 - 80	Not classified
Octamethylcyclotetrasiloxane substance listed as REACH Candidate (Octamethylcyclotetrasiloxane (D4))	(CAS-No.) 556-67-2 (EC-No.) 209-136-7 (EC Index-No.) 014-018-00-1	< 1	Flam. Liq. 3, H226 Repr. 2, H361f Aquatic Chronic 1, H410 (M=10)
Decamethylcyclopentasiloxane substance listed as REACH Candidate (Decamethylcyclopentasiloxane (D5))	(CAS-No.) 541-02-6 (EC-No.) 208-764-9	< 1	Not classified
Dodecamethylcyclohexasiloxane substance listed as REACH Candidate (Dodecamethylcyclohexasiloxane (D6))	(CAS-No.) 540-97-6 (EC-No.) 208-762-8	< 1	Not classified

Full text of H-statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-Aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-Aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

First-Aid Measures After Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 5 minutes. Obtain medical attention if irritation develops or persists.

First-Aid Measures After Eye Contact: Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

First-Aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Effects After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Effects After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Effects After Eye Contact	May cause slight irritation to eyes.
Symptoms/Effects After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	None expected under normal conditions of use.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media	Water spray, fog, carbon dioxide (CO_2), alcohol-resistant foam, or dry chemical.
Unsuitable Extinguishing Media	Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard	Not considered flammable but may burn at high temperatures.
Explosion Hazard	Product is not explosive.
Reactivity	Hazardous reactions will not occur under normal conditions.
Hazardous Combustion Products	Barium oxides. Carbon oxides (CO, CO_2). Formaldehyde. Silicon oxides. Sulphur compounds.

5.3. Advice for Firefighters

Precautionary Measures Fire	Exercise caution when fighting any chemical fire.
Firefighting Instructions	Use water spray or fog for cooling exposed containers.
Protection During Firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures	Avoid breathing dust, mist, spray. Avoid all contact with skin, eyes, or clothing.

6.1.1. For Non-Emergency Personnel

Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment	Equip cleanup crew with proper protection.
Emergency Procedures	Upon arrival at the scene, a first responder is expected to recognise the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit. Ventilate area.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment	Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for Cleaning Up	Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Precautions for Safe Handling	Avoid breathing dust, mist, spray. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures	Comply with applicable regulations.
Storage Conditions	Store in accordance with applicable national storage class systems. Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Incompatible Materials	Strong acids, strong bases, strong oxidisers.

7.3. Specific End Use(s)

For easy and precise additions of Barium Sulfate to high consistency silicone materials.
For professional use only

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Please see section 16 for the legal basis of limit value information in section 8.1, including the national legislation or provision which gives rise to a given limit.

Barium sulfate (7727-43-7)		
Belgium	OEL TWA (Legal Basis:Royal Decree 21/01/2020)	5 mg/m³ (without asbestos fibers and <1% crystalline silicon dioxide)
Bulgaria	OEL TWA (Legal Basis:Reg. No. 13/10)	10 mg/m³
Croatia	OEL TWA (Legal Basis:OG No. 91/2018)	10 mg/m³ (total dust, inhalable particles) 4 mg/m³ (respirable dust)
Germany	OEL TWA (Legal Basis:TRGS 900)	1,25 mg/m³ (respirable fraction (dust) 10 mg/m³ (inhalable fraction (dust)
Ireland	OEL TWA (Legal Basis:2020 COP)	5 mg/m³ (respirable dust)
Ireland	OEL STEL (Legal Basis:2020 COP)	15 mg/m³ (calculated-respirable dust)
USA ACGIH	OEL TWA (Legal Basis:IMDFN1)	5 mg/m³ (inhalable particulate matter, particulate matter containing no asbestos and <1% crystalline silica)
Portugal	OEL TWA (Legal Basis:Portuguese Norm NP 1796:2014)	5 mg/m³
Slovakia	OEL TWA (Legal Basis:Gov. Decree 33/2018)	4 mg/m³ (inhalable fraction) 1,5 mg/m³ (respirable fraction)
Spain	OEL TWA (Legal Basis:OELCAIS)	10 mg/m³ (this value is for the particulate matter that is free from Asbestos and contains less than 1% of crystalline Silica)
Switzerland	OEL TWA (Legal Basis:OLVSNAIF)	3 mg/m³ (respirable dust)

8.2. Exposure Controls

Appropriate Engineering Controls	Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.
Personal Protective Equipment	Gloves. Protective clothing. Protective goggles. Personal protective equipment should be chosen in accordance with Regulation (EU) 2016/425, CEN standards, and in discussion with the supplier of the protective equipment.

Materials for Protective Clothing	Chemically resistant materials and fabrics.
Hand Protection	Wear protective gloves.
Eye Protection	Chemical safety goggles.
Skin and Body Protection	Wear suitable protective clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.
Other Information	When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	Liquid
Colour, Appearance	White paste
Odour	Odourless
Odour Threshold	No data available
pH	Not available
Evaporation Rate	No data available
Melting Point	Not available
Freezing Point	Not available
Boiling Point	> 135 °C (275 °F)
Flash Point	> 135 °C (275 °F)
Auto-Ignition Temperature	Not available
Decomposition Temperature	No data available
Flammability (solid, gas)	Not applicable
Vapour Pressure	No data available
Relative Vapour Density At 20 °C	No data available
Relative Density	2.31 (water = 1)
Solubility	Water: insouble
Partition Coefficient n-Octanol/Water	No data available
Viscosity	No data available
Explosive Properties	No data available
Oxidising Properties	No data available
Explosive Limits	Not applicable
Particle Aspect Ratio	Not applicable
Particle Aggregation State	Not applicable
Particle Agglomeration State	Not applicable

Particle Specific Surface Area	Not applicable
Particle Dustiness	Not applicable

9.2. Other Information

VOC content	< 1 %

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability
Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of Hazardous Reactions
Hazardous polymerization will not occur.

10.4. Conditions to Avoid
Direct sunlight, extremely high or low temperatures, and incompatible materials.

10.5. Incompatible Materials
Strong acids, strong bases, strong oxidisers.

10.6. Hazardous Decomposition Products
Thermal decomposition may produce: Barium oxides. Carbon oxides (CO, CO_2). Silicon oxides. Sulphur oxides. Formaldehyde. Will decompose above 150 °C (>300° F) releasing formaldehyde vapors. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Hazard Classes As Defined In Regulation (Ec) No 1272/2008

Likely Routes of Exposure	Inhalation Ingestion Dermal Eye contact
Acute Toxicity (Oral)	Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Dermal)	Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Inhalation)	Not classified (Based on available data, the classification criteria are not met)

Barium sulfate (7727-43-7)	
LD50 Oral Rat	> 5000 mg/kg

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg (No mortality)
LD50 Dermal Rat	> 2375 mg/kg
LD50 Dermal Rabbit	> 2,5 ml/kg (No mortality)
LC50 Inhalation Rat	36 mg/l/4h

Decamethylcyclopentasiloxane (541-02-6)	
LD50 Oral Rat	> 5000 mg/kg (Species: Sprague-Dawley)
LD50 Dermal Rabbit	> 2000 mg/kg (Species: New Zealand White) No deaths reported
LC50 Inhalation Rat	8,67 mg/l/4h

Dodecamethylcyclohexasiloxane (540-97-6)	
LD50 Oral Rat	> 50 g/kg
LD50 Dermal Rat	> 2000 mg/kg (No mortality)

Skin Corrosion/Irritation	Not classified (Based on available data, the classification criteria are not met)

Eye Damage/Irritation	Not classified (Based on available data, the classification criteria are not met)
Respiratory or Skin Sensitization	Not classified (Based on available data, the classification criteria are not met)
Germ Cell Mutagenicity	Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity	Not classified (Based on available data, the classification criteria are not met)
Reproductive Toxicity	Not classified (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Single Exposure)	Not classified (Based on available data, the classification criteria are not met)
Specific Target Organ Toxicity (Repeated Exposure)	Not classified (Based on available data, the classification criteria are not met)
Aspiration Hazard	Not classified (Based on available data, the classification criteria are not met)
Symptoms/Injuries After Inhalation	Prolonged exposure may cause irritation.
Symptoms/Injuries After Skin Contact	Prolonged exposure may cause skin irritation.
Symptoms/Injuries After Eye Contact	May cause slight irritation to eyes.
Symptoms/Injuries After Ingestion	Ingestion may cause adverse effects.
Chronic Symptoms	None expected under normal conditions of use.

11.2. Information On Other Hazards

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to humans as it does not meet the criteria set out in section A of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Hazardous To The Aquatic Environment, Short-Term (Acute)	Not classified (Based on available data, the classification criteria are not met)
Hazardous To The Aquatic Environment, Long-Term (Chronic)	Toxic to aquatic life with long lasting effects.

Barium sulfate (7727-43-7)	
EC50 - Crustacea	32 mg/l

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 - Fish	> 22 µg/l

12.2. Persistence and Degradability

MED2-4102	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

MED2-4102	
Bioaccumulative Potential	Not established.

Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish	12400
Partition coefficient n-octanol/water (Log Pow)	5,1

12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB Assessment

Component	
Octamethylcyclotetrasiloxane (556-67-2)	This substance meets the PBT criteria of REACH regulation, annex XIII This substance meets the vPvB criteria of REACH regulation, annex XIII
Decamethylcyclopentasiloxane (541-02-6)	This substance meets the vPvB criteria of REACH regulation, annex XIII
Dodecamethylcyclohexasiloxane (540-97-6)	This substance meets the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine Disrupting Properties

Based on available data this substance/the substances in this mixture not listed below do(es) not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100 and/or the criteria set out in Regulation (EU) 2018/605, or the substance(s) are not required to be disclosed.

12.7. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

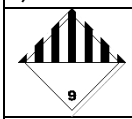
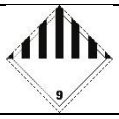
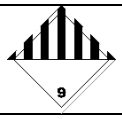
Product/Packaging Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

In accordance with ADR / RID / IMDG / IATA / AND

ADR	IMDG	IATA	ADN	RID
14.1. UN Number or ID Number				
UN 3082	UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN Proper Shipping Name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octamethylcyclotetrasiloxane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octamethylcyclotetrasiloxane)	Environmentally hazardous substance, liquid, n.o.s. (Octamethylcyclotetrasiloxane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octamethylcyclotetrasiloxane)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Octamethylcyclotetrasiloxane)
14.3. Transport Hazard Class				
9	9	9	9	9
				
14.4. Packing Group				
III	III	III	III	III
14.5. Environmental Hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes

14.6. Special Precautions For User
No additional information available

14.7. Maritime Transport in Bulk According to IMO instruments
Not applicable

SECTION 15: REGULATORY INFORMATION

15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

15.1.1. EU-Regulations

15.1.1.1. REACH Annex XVII Information
Contains no REACH substances with Annex XVII restrictions

15.1.1.2. REACH Candidate List Information
Contains a substance on the REACH candidate list in concentration ≥ 0.1% or with a lower specific limit:
Octamethylcyclotetrasiloxane (D4) (EC 209-136-7, CAS 556-67-2)
Decamethylcyclopentasiloxane (D5) (EC 208-764-9, CAS 541-02-6),
Dodecamethylcyclohexasiloxane (D6) (EC 208-762-8, CAS 540-97-6)

15.1.1.3. POP (2019/1021) - Persistent Organic Pollutants Information
Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

15.1.1.4. PIC Regulation EU (649/2012) - Export and Import of Hazardous Chemicals Information
Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

15.1.1.5. REACH Annex XIV Information
Contains no REACH Annex XIV substances

15.1.1.6. Substances Depleting the Ozone layer (1005/2009) Information
No additional information available

15.1.1.7. EC Inventory Information
No additional information available

15.1.1.8. Other Information
No additional information available

15.1.2. National Regulations
No additional information available

15.1.3. International Inventory Lists
No additional information available

15.2. Chemical Safety Assessment
No chemical safety assessment has been carried out

SECTION 16: OTHER INFORMATION

Date of Preparation or Latest Revision	07/01/2022
Data Sources	Information and data obtained and used in the authoring of this safety data sheet could come from database subscriptions, official government regulatory body websites, product/ingredient manufacturer or supplier specific information, and/or resources that include substance specific data and classifications according to GHS or their subsequent adoption of GHS.
Other Information	According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full Text of H- and EUH-statements:

Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H361f	Suspected of damaging fertility.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
Repr. 2	Reproductive toxicity, Category 2

Indication of Changes

Section	Change	Date Changed	Version
1	Language modified	07/01/2022	4.0
2	Classification modified	07/01/2022	4.0
3	Data modified	07/01/2022	4.0
4	Language modified	07/01/2022	4.0
5	Language modified	07/01/2022	4.0
6	Language modified	07/01/2022	4.0
7	Language modified	07/01/2022	4.0
8	Data modified	07/01/2022	4.0
9	Data modified	07/01/2022	4.0
10	Language modified	07/01/2022	4.0
11	Data modified	07/01/2022	4.0
12	Classification modified	07/01/2022	4.0
13	Language modified	07/01/2022	4.0
15	Data modified	07/01/2022	4.0

Abbreviations and Acronyms

ACGIH – American Conference of Governmental Industrial Hygienists
ADN – European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road
ATE - Acute Toxicity Estimate
BCF - Bioconcentration Factor
BEI - Biological Exposure Indices (BEI)
BOD – Biochemical Oxygen Demand
CAS No. - Chemical Abstracts Service Number
CLP – Classification, Labeling and Packaging Regulation (EC) No 1272/2008
COD – Chemical Oxygen Demand
EC – European Community
EC50 - Median Effective Concentration
EEC – European Economic Community
EINECS – European Inventory of Existing Commercial Chemical Substances
EmS-No. (Fire) - IMDG Emergency Schedule Fire
EmS-No. (Spillage) - IMDG Emergency Schedule Spillage
EU – European Union
NDS - Najwyzsze Dopuszczalne Stezenie
NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe
NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe
NOAEL - No-Observed Adverse Effect Level
NOEC - No-Observed Effect Concentration
NRD - Nevirsytinas Ribinis Dydis
NTP – National Toxicology Program
OEL - Occupational Exposure Limits
PBT - Persistent, Bioaccumulative and Toxic
PEL - Permissible Exposure Limit
pH – Potential Hydrogen
REACH – Registration, Evaluation, Authorisation, and Restriction of Chemicals
RID – Regulations Concerning the International Carriage of Dangerous Goods by Rail
SADT - Self Accelerating Decomposition Temperature
SDS - Safety Data Sheet
STEL - Short Term Exposure Limit
STOT - Specific Target Organ Toxicity
TA-Luft - Technische Anleitung zur Reinhaltung der Luft
TEL TRK – Technical Guidance Concentrations
ThOD – Theoretical Oxygen Demand

ErC50 - EC50 in Terms of Reduction Growth Rate
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
IARC - International Agency for Research on Cancer
IATA - International Air Transport Association
IBC Code - International Bulk Chemical Code
IMDG - International Maritime Dangerous Goods
IPRV - Ilgalaikio Poveikio Ribinis Dydis
IOELV – Indicative Occupational Exposure Limit Value
LC50 - Median Lethal Concentration
LD50 - Median Lethal Dose
LOAEL - Lowest Observed Adverse Effect Level
LOEC - Lowest-Observed-Effect Concentration
Log Koc - Soil Organic Carbon-water Partitioning Coefficient
Log Kow - Octanol/water Partition Coefficient
Log Pow - Ratio of the equilibrium concentration (C) of a dissolved substance in a two-phase system consisting of two largely immiscible solvents, in this case octanol and water
MAK – Maximum Workplace Concentration/Maximum Permissible Concentration
MARPOL - International Convention for the Prevention of Pollution
TLM - Median Tolerance Limit
TLV - Threshold Limit Value
TPRD - Trumpalaikio Poveikio Ribinis Dydis
TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von Gefahrstoffen in ortsbeweglichen Behältern
TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine
TRGS 900 - Technische Regel für Gefahrstoffe 900 – Arbeitsplatzgrenzwerte
TRGS 903 - Technische Regel für Gefahrstoffe 903 - Biologische Grenzwerte
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
VOC – Volatile Organic Compounds
VLA-EC - Valor Límite Ambiental Exposición de Corta Duración
VLA-ED - Valor Límite Ambiental Exposición Diaria
VLE – Valeur Limite D'exposition
VME – Valeur Limite De Moyenne Exposition
vPvB - Very Persistent and Very Bioaccumulative
WEL – Workplace Exposure Limit
WGK - Wassergefährdungsklasse

Limit Value Legal Basis*

*Includes the below and any related regulations/provisions, and subsequent amendements

EU - 2019/1831 EU in accor. with 98/24/EC - Directive 2019/1831/EU of October 24, 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 2000/39/EC.

EU - 2019/1243/EU, and 98/24/EC) - Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work and amendment Regulation (EU) 2019/1243.

Austria - BGBl. II Nr. 254/2018 - Ordinance on Limit Values for Workplace Substances and on Carcinogens from the Federal Ministry of Economics and Labour, Published in 2003, Appendix 1: Substance List, Published through: Ministry of Economics and Labour of the Republic of Austria amended through the Government Gazette II (BGBL. II) No 119/2004) & BGBl. II No. 242/2006, BGBl. II No. 243/2007, lastly changed through BGBl. I Nr. 51/2011), BGBl. II Nr. 186/2015, BGBl. II Nr. 288/2017 amended by BGBl. II Nr. 254/2018.

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