

Hazard Pictograms (CLP)

Signal Word (CLP) Hazard Statements (CLP)

Danger H225 - Highly flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways.



Safety Data Sheet

MED-162

1.1.

Product Form

Synonyms

Product Name

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Revision Date: 20/06/2022 Date of Issue: 24/04/2014

Version: 7.0

MED-162 Silicone Primer

Mixture

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

1.2.1. Relevant Identified Uses

COMPANY/UNDERTAKING

Product Identifier

Uses Advised Against

1.3.

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1.4.

SECTION 2: HAZARDS IDENTIFICATION

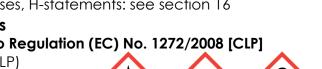
2.1.

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

Flam. Liq. 2	H225
Skin Irrit. 2	H315
Eye Dam. 1	H318
STOT SE 3	H336
Asp. Tox. 1	H304
Aquatic Chronic 2	H411
Full text of hazard classes,	H-statements: see sec

2.2.





GHS05

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

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878			
	H315 - Causes skin irritation.		
	H318 - Causes serious eye damage.		
	H336 - May cause drowsiness or dizziness.		
	H411 - Toxic to aquatic life with long lasting effects.		
Precautionary Statements (CLP)	P210 - Keep away from heat, hot surfaces, sparks, open flames		
	and other ignition sources. No smoking.		
	P233 - Keep container tightly closed.		
	P240 - Ground and bond container and receiving equipment.		
	P241 - Use explosion-proof electrical/ventilating/lighting		
	equipment.		
	P242 - Use non-sparking tools.		
	P243 - Take action to prevent static discharges.		
	P261 - Avoid breathing mist, spray, vapours.		
	P264 - Wash hands, forearms, and other exposed areas		
	thoroughly after handling.		
	P271 - Use only outdoors or in a well-ventilated area.		
	P273 - Avoid release to the environment.		
	P280 - Wear eye protection, protective clothing, protective		
	gloves.		
	P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER		
	or doctor.		
	P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all		
	contaminated clothing. Rinse skin with water.		
	P304+P340 - IF INHALED: Remove person to fresh air and keep		
	comfortable for breathing.		
	P305+P351+P338 - IF IN EYES: Rinse cautiously with water for		
	several minutes. Remove contact lenses, if present and easy to		
	do. Continue rinsing.		
	P310 - Immediately call a POISON CENTER or doctor.		
	P321 - Specific treatment (see section 4 on this label).		
	P331 - Do NOT induce vomiting.		
	P332+P313 - If skin irritation occurs: Get medical		
	advice/attention.		
	P362+P364 - Take off contaminated clothing and wash it before		
	reuse.		
	P370+P378 - In case of fire: Use media other than water to		
	extinguish.		
	P391 - Collect spillage.		
	P403+P235 - Store in a well-ventilated place. Keep cool.		
	P405 - Store locked up.		
	P501 - Dispose of contents/container in accordance with local,		
	regional, national and/or international regulation.		
EUH-statements	•		
	EUH066 - Repeated exposure may cause skin dryness or		
	cracking.		

2.3. Other Hazards

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

This substance/mixture does not meet the PBT/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

Safety Data Sheet

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

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
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	(CAS-No.) Not available (REACH Registration No.) 01-2119473851-33 (EC-No.) 920-750-0	75 - 85	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Platinum Catalyst	(CAS-No.) 68478-92-2	5 - 10	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
1-Butanol, titanium(4+) salt	(CAS-No.) 5593-70-4 (EC-No.) 227-006-8	1 -5	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336 STOT SE 3, H335

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	When symptoms occur: go into open air and ventilate
Inhalation	suspected area. Obtain medical attention if breathing difficulty persists.
First-Aid Measures After Skin	Immediately remove contaminated clothing. Immediately
Contact	drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.
First-Aid Measures After Eye	Immediately rinse with water for at least 30 minutes. Remove
Contact	contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
First-Aid Measures After	Rinse mouth. Do NOT induce vomiting. Place affected person
Ingestion	on their side. Immediately call a POISON CENTER or
0	doctor/physician.
4.2. Most Important Symptoms	and Effects Both Acute and Delayed
Symptoms/Effects	Causes skin irritation. Causes serious eye damage. May be fatal if swallowed and enters airways. May cause drowsiness and dizziness.
Symptoms/Effects After	High concentrations may cause central nervous system
Inhalation	depression such as dizziness, vomiting, numbness, drowsiness,
	headache, and similar narcotic symptoms.
Symptoms/Effects After Skin Contact	Redness, pain, swelling, itching, burning, dryness, and dermatitis.
Symptoms/Effects After Eye Contact	Causes permanent damage to the cornea, iris, or conjunctiva.

MED-1	62
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Symptoms/Effects After
IngestionAspiration into the lungs can occur during ingestion or vomiting
and may cause lung injury.
Repeated exposure may cause skin dryness or cracking.

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	Dry chemical powder, alcohol-resistant toam, carbon dioxide (CO ₂). Water may be ineffective but water should be used to
	keep fire-exposed container cool.
Unsuitable Extinguishing Media	Do not use a heavy water stream. A heavy water stream may spread burning liquid.
5.2. Special Hazards Arising Fi	rom the Substance or Mixture
Fire Hazard	Highly flammable liquid and vapour.
Explosion Hazard	May form flammable or explosive vapour-air mixture.
Reactivity	Reacts violently with strong oxidisers. Increased risk of fire or explosion.
Hazardous Combustion Products	Carbon oxides (CO, CO ₂). Metal oxides. Silicon oxides.
5.3. Advice for Firefighters	
Precautionary Measures Fire Firefighting Instructions	Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
Protection During Firefighting	Do not enter fire area without proper protective equipment, including respiratory protection.
Other Information	Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures

Do not get in eyes, on skin, or on clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges. Do not breathe vapour, mist or spray. Caution: this product can cause the floor to be very slippery.

6.1.1. For Non-Emergency Person	nel
Protective Equipment	Use appropriate personal protective equipment (PPE).
Emergency Procedures	Evacuate unnecessary personnel. Stop leak if safe to do so.
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. Eliminate ignition sources first, then ventilate the area.

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6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment. Collect spillage.

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. As an immediate precautionary measure, isolate spill or leak area in all directions.
Methods for Cleaning Up	Use only non-sparking tools. Clean up spills immediately and dispose of waste safely. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.
6.4 Peteroneo to Other Sec	

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

Additional Hazards When	Handle empty containers with care because residual vapours		
Processed	are flammable.		
Precautions for Safe Handling	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapours, mist, spray. Take precautionary measures against static discharge. Use only non-sparking tools. Do not get in eyes, on skin, or on clothing.		
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. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.		
Storage Conditions	Store in accordance with applicable national storage class systems. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place. Store locked up/in a secure area.		
Incompatible Materials	Strong acids, strong bases, strong oxidisers.		
7.3. Specific End Use(s)			
For professional use only			

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.

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8.2. Exposure Controls

Personal Protective Equipment

Appropriate Engineering Controls Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when flammable gases or vapours may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Ensure all national/local regulations are observed. Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. 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

Hand Protection Eye Protection Skin and Body Protection Respiratory Protection Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing. Wear protective gloves. Chemical safety goggles. Wear suitable protective clothing. 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

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

protection.

Physical State	Liquid
Colour, Appearance	Translucent
Odour	Solvent
Odour Threshold	No data available
рН	No data available
Evaporation Rate	No data available
Melting Point	No data available
Freezing Point	No data available
Boiling Point	99 °C (210,2 °F)
Flash Point	17 °C (62,6 °F)
Auto-Ignition Temperature	No data 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	<]
Solubility	No data available
Partition Coefficient n-Octanol/Water	No data available
Viscosity	No data available
Explosive Properties	No data available

Safety Data Sheet

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

No data available
Not applicable
75 – 85 %

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reacts violently with strong oxidisers. Increased risk of fire or explosion.

10.2. Chemical Stability

Highly flammable liquid and vapour. May form flammable or explosive vapour-air mixture.

10.3. Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

10.4. Conditions to Avoid

Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.

10.5. Incompatible Materials

Strong acids, strong bases, strong oxidisers.

10.6. Hazardous Decomposition Products

Thermal decomposition may produce: Carbon oxides (CO, CO₂). Metal oxides. Silicon oxides.

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)

1-Butanol, titanium(4+) salt (5593-70-4)	
LD50 Oral Rat	> 2000 mg/kg
LD50 Oral 3122 mg/kg	
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, o (REACH Registration No.) 01-2119473851-33	cyclics
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	3000 mg/kg
Skin Corrosion/Irritation	Causes skin irritation.
Eye Damage/Irritation	Causes serious eye damage.
Respiratory or Skin Sensitization	Not classified (Based on available data, the classification criteria are not met)

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

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)	May cause drowsiness or dizziness.
Specific Target Organ Toxicity (Repeated Exposure)	Not classified (Based on available data, the classification criteria are not met)
Aspiration Hazard	May be fatal if swallowed and enters airways.
Symptoms/Injuries After Inhalation	High concentrations may cause central nervous system depression such as dizziness, vomiting, numbness, drowsiness, headache, and similar narcotic symptoms.
Symptoms/Injuries After Skin Contact	Redness, pain, swelling, itching, burning, dryness, and dermatitis.
Symptoms/Injuries After Eye Contact	Causes permanent damage to the cornea, iris, or conjunctiva.
Symptoms/Injuries After Ingestion	Aspiration into the lungs can occur during ingestion or vomiting and may cause lung injury.
Chronic Symptoms	Repeated exposure may cause skin dryness or cracking.

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	Not classified (Based on available data, the classification
Environment, Short-Term (Acute)	criteria are not met)
Hazardous To The Aquatic	Toxic to aquatic life with long lasting effects.
Environment, Long-Term	
(Chronic)	
1-Butanol, titanium(4+) salt (5593-70-4)	
EC50 Crustacea	680 mg/l
12.2. Persistence and Degrada	bility
MED-162	
Persistence and Degradability	May cause long-term adverse effects in the environment.
12.3. Bioaccumulative Potentic	3
MED-162	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil

No additional information available

12.5. Results of PBT and vPvB Assessment

Does not contain any PBT/vPvB substances >= 0.1% assessed in accordance with REACH Annex XVIII

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

Safety Data Sheet

Other Information

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

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

Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Product/Packaging Disposal	Dispose of contents/container in accordance with local,
Recommendations	regional, national, and international regulations.
Additional Information	Handle empty containers with care because residual vapours are flammable.
Ecology - Waste Materials	This material is hazardous to the aquatic environment. Keep out of sewers and waterways. 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 / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN Number	or ID Number		·	
UN 1268				
14.2. UN Proper S	hipping Name			
PETROLEUM	PETROLEUM	Petroleum	PETROLEUM	PETROLEUM
DISTILLATES, N.O.S.				
14.3. Transport H	azard Class			
3	3	3	3	3
14.4. Packing Gr	ουρ			
	II		II	
14.5. Environmer	ntal Hazards			
Dangerous for the				
environment : Yes				
	Marine pollutant :			
_	Yes			
14.4 Special Pre	cautions For Usor			

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

Safety Data Sheet

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

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 no substance on the REACH candidate list

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	20/06/2022
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-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

Safety Data Sheet

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

ACCOID	ing to Regulation (EC) No. 1907/2006 (REACH) with its dri	lenament Regulation (EU) 2020/8/8		
	H411	Toxic to aquatic life with long lasting effects.		
	Skin Irrit. 2	Skin corrosion/irritation, Category 2		
	STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis		
Clas	sification and Procedure Used to Deri	ve the Classification for Mixtures According to Regulation (EC) 1272/2008 [CLP]:		
	Flam. Liq. 2	On basis of test data		
	Skin Irrit. 2	Calculation method		
	Eye Dam. 1	Calculation method		
	STOT SE 3	Calculation method		
	Asp. Tox. 1	Calculation method		
	Aquatic Chronic 2	Calculation method		

Indication of Changes

Section	Change	Date Changed	Versior
1	Language modified	20/06/2022	6.0
2	Data modified	05/01/2018	5.0
2	Classification modified; Language modified	20/06/2022	6.0
3	Language modified	29/06/2015	4.0
3	Data modified	20/06/2022	6.0
4	Language modified	20/06/2022	6.0
5	Language modified	20/06/2022	6.0
6	Language modified	20/06/2022	6.0
7	Language modified	20/06/2022	6.0
8	Language modified	20/06/2022	6.0
9	Data modified	20/06/2022	6.0
10	Language modified	20/06/2022	6.0
11	Language modified	20/06/2022	6.0
12	Language modified	20/06/2022	6.0
13	Language modified	20/06/2022	6.0
14	Classification modified	20/06/2022	6.0
14	Language modified	20/06/2022	6.0
15	Language modified	29/06/2015	4.0
15	Language modified	20/06/2022	6.0
16	Language modified	29/06/2015	4.0
16	Language modified	05/01/2018	5.0
16	Language modified	20/06/2022	6.0

Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial NDS - Najwyzsze Dopuszczalne Stezenie Hygienists NDSCh - Najwyzsze Dopuszczalne Stezenie Chwilowe NDSP - Najwyzsze Dopuszczalne Stezenie Pulapowe ADN - European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways NOAEL - No-Observed Adverse Effect Level NOEC - No-Observed Effect Concentration ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road NRD - Nevirsytinas Ribinis Dydis ATE - Acute Toxicity Estimate NTP – National Toxicology Program BCF - Bioconcentration Factor **OEL - Occupational Exposure Limits** BEI - Biological Exposure Indices (BEI) PBT - Persistent, Bioaccumulative and Toxic BOD - Biochemical Oxygen Demand PEL - Permissible Exposure Limit pH – Potential Hydrogen CAS No. - Chemical Abstracts Service Number CLP - Classification, Labeling and Packaging Regulation (EC) No REACH - Registration, Evaluation, Authorisation, and Restriction of 1272/2008 Chemicals COD - Chemical Oxygen Demand RID - Regulations Concerning the International Carriage of EC – European Community Dangerous Goods by Rail EC50 - Median Effective Concentration SADT - Self Accelerating Decomposition Temperature EEC – European Economic Community SDS - Safety Data Sheet EINECS - European Inventory of Existing Commercial Chemical STEL - Short Term Exposure Limit Substances STOT - Specific Target Organ Toxicity EmS-No. (Fire) - IMDG Emergency Schedule Fire TA-Luft - Technische Anleitung zur Reinhaltung der Luft TEL TRK – Technical Guidance Concentrations EmS-No. (Spillage) - IMDG Emergency Schedule Spillage EU – European Union ThOD - Theoretical Oxygen Demand ErC50 - EC50 in Terms of Reduction Growth Rate TLM - Median Tolerance Limit GHS - Globally Harmonized System of Classification and Labeling TLV - Threshold Limit Value TPRD - Trumpalaikio Poveikio Ribinis Dydis of Chemicals TRGS 510 - Technische Regel für Gefahrstoffe 510 - Lagerung von IARC - International Agency for Research on Cancer IATA - International Air Transport Association Gefahrstoffen in ortsbeweglichen Behältern IBC Code - International Bulk Chemical Code TRGS 552 – Technische Regeln für Gefahrstoffe - N-Nitrosamine TRGS 900 - Technische Regel für Gefahrstoffe 900 -IMDG - International Maritime Dangerous Goods IPRV - Ilgalaikio Poveikio Ribinis Dydis Arbeitsplatzgrenzwerte

Safety Data Sheet

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

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

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 - BGBI. 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) & BGBI. II No. 242/2006, BGBI. II No. 243/2007, lastly changed through BGBI. I Nr. 51/2011), BGBI. II Nr. 186/2015, BGBI. II Nr. 288/2017 amended by BGBI. II Nr. 254/2018.

Austria - BLV BGBI. II Nr. 254/2018 - Ordinance on health monitoring at the workplace 2008, published through BGBI. II Nr. 224/2007 by Austria Minister for Labor and Social Affairs, Lastly changed through BGBI. II Nr. 254/2018

Belgium - Royal Decree 21/01/2020 - Royal decree amending title 1 relating to chemical agents in Book VI of the code of well-being at work, with regard to the list of limit values of exposure to chemical agents and title 2 relating to carcinogens, mutagens and reprotoxics of Book VI of the code of well-being at work (1)

Bulgaria - Reg. No. 13/10 -

Regulation No. 13 of December 30, 2003 on the Protection of Workers from Hazards Related to Exposure to Chemical Agents at Work Labor Code, Annex No.1 Limit values of chemical agents in the air of the working environment, and Annex № 2 Biological limit values of chemical agents and their metabolites (bio markers of exposure) or bio markers of effect Amended by: 71/2006, 67/2007, 2/2012, 46/2015, 73/2018, 5/2020), and Regulation No.10 of September 26, 2003 on the Protection of Workers from the Risks Associated with Exposure to Carcinogens and Mutagens at Work Annex No.1 Occupational Exposure Limits, Amended by: 8/2004, 46/2015, 5/2020

Croatia - OG No. 91/2018 - Regulation on the Protection of Workers from Exposure to Hazardous Chemicals at Work, the Limit Values of Exposure and the Biological Limit Values. Official Gazette No. 91 of October 12, 2018

Cyprus - KDP 16/2019 - Government of Cyprus Cabinet of Ministers Regulation 268/2001 - Safety and Health in the Working Environment (Chemical Substances) Article 38, As amended by Regulation 16/2019 and Cabinet of Ministers Regulation 153/2001 -Safety and Health in the Working Environment (Chemical Substances-Carcinogens), as amended by Regulation 493/2004 -Safety and Health in the Working Environment (Chemical Substances - Carcinogens) AND Law 47(I) 2000 - Occupational Health and Safety (Asbestos), as amended by Decree 316/2006. Czech Republic - Reg. 41/2020 - Regulation 41/2020 amending Regulation 361/2007 of Coll. establishing Occupation Exposure Limits as amended

Czech Republic - Decree No. 107/2013 - Decree No. 107/2013 Coll., amending Decree No. 432/2003 Coll., laying down the conditions for the application of the work into categories, limit 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

Greece - PWHSE - Occupational Exposure Limits - Protection of workers' health and safety from exposure to certain chemical substances during the workday, (latest amendment 82/2018) and Occupation Exposure Limits - Protection of workers' health and safety from exposure to certain carcinogenic and mutagenic chemical substances (latest amendment 26/2020), and Presidential Decree 212/2006 - Protection of workers that are exposed to asbestos.

Hungary - Decree 05/2020 - 5/2020. (II. 6.) ITM decree on the protection of the health and safety of workers from the risks related to chemical agents

Ireland - 2020 COP - 2020 Code of Practice for the Chemical Agents Regulations, Schedule 1

Italy - Decree 81 - Title IX, Annex XLIII and XXXVIII, Professional Exposure Limits and Annex XXXIX Mandatory Biological Limit Values and Health Monitoring, Article 1, Law 123 of August 3, 2007, Legislative Decree 81 of April 9, 2008, Last gmended: January 2020 Italy - IMDFN1 - Ministerial Decree of August 20, 1999 Final Note (1) Latvia - Reg. No. 325 - Cabinet of Ministers Regulation No. 325 Labour Protection Requirements when Coming in Contact with Chemical Substances at Workplaces, Amended by Cabinet of Ministers Regulation No. 92, 163, 407 and No. 11.

Lithuania - HN 23:2011 - Lithuanian Hygiene Standard HN 23:2011 Occupational Exposure Limit Values, Amended by Order V-695/A1-272.

Luxembourg - A-N 684 - Grand-Ducal Regulation of 20 July 2018 amending the Grand-Ducal Regulation of 14 November 2016 concerning the protection of the safety and health of employees against the risks associated with chemical agents in the workplace. Official journal of the Grand-Duke of Luxembourg, A-N°684 of 2018

Malta - MOSHAA Ch. 424 - Malta Occupational Health and Safety Authority Act: Chapter 424 as amended by: Legal Notice 353, 53, 198. and 57.

Netherlands- OWCRLV - Occupational Working Conditions Regulation, Limit Values for substances harmful to health, Annex XVIII, Updated from August 1, 2020.

Norway - FOR-2020-04-060695 - Regulations concerning action and limit values for physical and chemical agents in the working environment and classified biological agents, FOR-2011-12-06-1358, Updated by: FOR-2020-04-06-695, FOR-2020-03-23-402, FOR-

2018-12-20-2186, FOR-2018-08-21-1255, FOR-2017-12-20-2353. Poland - Dz. U. 2020 Nr. 61 - Regulation of the Minister of Family, Labor and Social Policy of June 12, 2018 on the Highest Allowable Concentrations and Intensities of Factors Harmful to Health in the Work Environment Dz.U. 2018 Nr. 1286 of June 12, 2018, Annex 1 -List of values of the highest permissible chemical concentrations and dust factors harmful to health in the work environment, amended by: Dz. U. 2020 Nr. 61.

Portugal - Portuguese Norm NP 1796:2014 - Occupational exposure limits and biological exposure indices to chemical agents. Table 1 - Occupational exposure limits and biological exposure indices to chemical agents (OELs), Law Decree 35/2020. Romania - Gov. Dec. No 1.218 - Governmental Decision No. 1.218 from 06/09/2006 on the minimum health and safety requirements for protection of workers from the risks related to exposure to chemical agents, Annex No. 1 Mandatory National Occupational

Safety Data Sheet

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

values for the parameters of biological exposure tests, collection of biological material conditions for the implementation of biological exposure tests and requirements for reporting work with asbestos and biological agents

Denmark - BEK No. 698 of 28/05/2020 - Order on Limit Values for Substances and Materials, The Statutory Order No. 507 of May 17, 2011, Appendix 1 - Limits for air pollution, etc. and Appendix 3 -Biological Exposure Values, Amended by: No. 986 of October 11, 2012, No. 655 of May 31, 2018, No. 1458 December 13, 2019, No. 698 of May 28, 2020

Estonia - Regulation No. 105 - Health and Safety Requirements for the Use of Dangerous Chemicals and Materials Containing Them and Occupational Exposure Limits to Chemical Agents Government of the Republic, Regulation No. 105 of 20 March 2001, Amended 17 October 2019, and 17 January, 2020. Finland - HTP-ARVOT 2020 - Concentrations Known to be

Hazardous, 654/2020 OEL values 2020 Publications of Ministry of Social Affairs and Health 2020:24 Annexes1, 2 and 3.

France - INRS ED 984 - Occupational Exposure Limit Values to Chemical Agents in France Published 2016 by the INRS National Institute of Research and Safety Health and safety of work, revised, updated by: Decree 2016-344, JORF No 0119, and Decree 2019-1487.

France - Decree 2009-1570 - Decree 2009-1570 of December 15, 2009, relative to the control of chemical risk on workplaces. Germany - TRGS 900 - Occupational Exposure Limits, Technical Rules for Dangerous Substances, latest amendment March, 2020 Germany - TRGS 903 - Biological Threshold Limits (BGW-Values), Technical Rules for Dangerous Substances, latest amendment March, 2020

Gibraltar - LN. 2018/131 - Factories (Control of Chemical Agents at Work) Regulations 2003 LN. 2003/035, amended by LN. 2008/035, LN. 2008/050, LN. 2012/021, LN. 2015/143, LN. 2018/181. Exposure Limit Values for Chemical Agents. Amended by Decision no. 157, 584, 359, and 1.

Slovakia - Gov. Decree 33/2018 - Government Decree of Slovak Republic 33/2018 on January 17, 2018 amending Government Decree of Slovak Republic 355/2006 about protection of health of employees when working with chemical agents

Slovenia - No. 79/19 - Regulation for protection of workers against risks related to carcinogenic or mutagenic substances exposure. Annex III - Classification and binding levels of carcinogenic or mutagenic substances for occupational exposure. The Official Journal of the Republic of Slovenia, No. 101/2005. Amended by 38/15, 79/19. Regulation for protection of workers against risks related to exposure to chemical substances at the workplace. Republic of Slovenia, No. 100/2001. Annex I - List of Binding Occupational Exposure Limit Values. Amended by 39/05, 53/07, 102/10, 38/15, 78/18, 78/19

Spain - AFS 2018:1 - NATIONAL INSTITUTE FOR HEALTH AND SAFETY AT WORK. Occupational exposure limits for chemical agents in Spain. Tables 1 and 3. Latest edition Feb. 2019

Sweden - AFS 2018:1 - Statute Book of the Swedish Work Environment Authority, AFS 2018:1

The Swedish Work Environment Authority's Ordinance and General Guidance on Hygienic Limit Values

Switzerland - OLVSNAIF - Occupational Limit Values 2020 Swiss National Accident Insurance Fund. List of Biological Limit Values (BAT-Werte) and List of MAK Values.

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