MATERIAL SAFETY DATA SHEET Material Safety Data Sheet EU format according to Commission Regulation (EU) 2020/878

Issue date: 4.05.2012, updating date: 8.02.2023

Version: 6

POLYESTER FILLER UNI



SECTION 1: SUBSTANCE/MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification

Product form: Mixtures Polyester filler Name:

Trade name: POLYESTER FILLER UNI UFI Code: VUQ0-K0JF-J000-S0RP

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

1.2.1. Relevant identified uses*:

For professional use in car refinish.

1.2.2 Uses advised against*:

No further data available.

1.3 Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.

Tel.: +48 34 329 45 03 Fax: +48 34 320 12 16 Ul. Łódzka 3

42-240 Rudniki k. Częstochowy, PL Registration number 000029202

Person responsible for the safety data sheet: ranal@ranal.pl

1.4. Emergency telephone

+48 34 329 45 03 (8.00 - 15.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture*

Classification according to the regulation (EC) no 1272/2008 [CLP]:

Flammable liquids, cat. 3 H226

Skin corrosion/irritation, cat. 2 H315

Serious eye damage/eye irritation, hazard cat 2 H319

Reproduction toxicity, cat. 2 H361d

Specific target organ toxicity - repeated exposure, cat. 1 H372

Full text of H and EUH phrases: see section 16.

Adverse effects related to physicochemical properties, effects on human health and the environment: No further data available.

2.2. Label elements

Labelling according to the regulation (EC) no 1272/2008[CLP].*

Contains:

Styrene.

Pictograms:







Signal word: DANGER

Risk index:

H226 Flammable liquid and vapour.

Causes skin irritation. H315

H319 Causes eve irritation.

H361d Suspected of damaging the unborn child.

Causes damage to organs through prolonged or repeated exposure. H372

Safety index:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P260 Do not breathe dust/ vapours. *

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Call a POISON CENTER or doctor/physician if you feel unwell. P312

EUH phrases:

EUH211 Warning! Hazardous respirable droplets may form if sprayed. Do not breathe spray or vapour. *

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2.3. Other hazards

Vapours of styrene form explosive mixtures with air. Vapours are heavier than air and accumulate near the ground and in the lower parts of rooms. Styrene may polymerize under the influence of high temperature or as a result of contact with strong oxidizing agents, peroxides, strong acids, alkalis, metal salts, copper and its alloys. Styrene polymerization is a highly exothermic process.

Does not contain PBT/vPvB substances ≥ 0.1% assessed in accordance with Annex XIII of REACH. *

The mixture does not contain any substance(s) included in the list established in accordance with Art. 59 sec. 1 of the REACH Regulation due to endocrine disrupting properties or is not identified as endocrine disrupting in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in a concentration equal to or greater than 0,1 % by weight. *

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Name	Product identification	%	Classification according to the regulation (EC) no 1272/2008[CLP]
Titanium dioxide; [as a powder with 1% or more of	CAS number: 13463-67-7	< 15	Carc. 2, H351
particles with an aerodynamic diameter of ≤10 μm]	EC number: 236-675-5		
the substance has an occupational exposure limit(s) (PL)	Index number: 022-006-00-2		
(Note V)(Note W)(Note 10)*	REACH: 01-2119489379-17		
Styrene	CAS number: 100-42-5	12.5 - 14	Flam. Liq. 3, H226, Acute Tox. 4
the substance has an occupational exposure limit(s) (PL)	EC number: 202-851-5		(Inhalation), H332, Skin Irrit. 2, H315,
(Note D)	Index number: 601-026-00-0		Eye Irrit. 2, H319, Repr. 2, H361d, STOT
	PEACH: 01-2119457861-32		RE 1, H372

- Note 10: The classification as an inhalation carcinogen applies only to mixtures in the form of a powder containing 1 % or more of titanium dioxide in the form of particles with an aerodynamic diameter of \leq 10 μ m or incorporated in such particles.
- Note D: Certain substances that are prone to spontaneous polymerization or decomposition are generally placed on the market in a stabilized form. This is the form in which they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state the name of the substance on the label, followed by the word 'unstabilised'.
- Note V: If the substance is to be placed on the market as fibers (diameter < 3 µm, length > 5 µm, aspect ratio ≥ 3:1) or as particles of the substance meeting the WHO criteria for fibers or as particles with modified surface chemistry, their hazardous properties should be assessed in accordance with Title II of this Regulation to assess whether a higher category should be applied (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal).
- Note W: A carcinogenic risk associated with this substance has been observed to occur when respirable dust is inhaled in amounts that severely impair the natural mechanisms for clearing particles from the lungs. This note is a description of the specific type of toxicity of the substance, not a criterion for classification under this Regulation. *

Full text of hazard statements provided in section 16 of the Sheet.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information: See section 11 of the Material Safety Data Sheet.

Airways:

If difficulties in breathing occur, remove the victim to fresh air and keep at rest in a position comfortable for breathing. *

Skin:

In case of skin contamination, immediately remove all contaminated clothing and wash contaminated skin with plenty of soap and water. Rinse skin with water/or shower. If skin irritation or rash occurs: Get medical advice/attention. If skin irritation persists, consult a doctor.*

Eyes:

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a doctor. In the case of contact with eyes, immediately rinse with plenty of water and get medical advice. *

Alimentary tract:

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a doctor. *

4.2 Most important symptoms both acute and delayed*

 $Symptoms/effects\ in\ the\ event\ of\ inhalation:\ Vapours\ may\ cause\ drowsiness\ and\ dizziness.$

Symptoms/effects in the event of skin contact: Prolonged or repeated contact may cause skin dryness.

Symptoms/effects in the event of contact with eyes: May cause eye irritation.

4.3 Indications of any immediate medical attention and special treatment needed

Symptomatic treatment. *

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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing agents: Extinguishing powder, foam resistant to alcohol, carbon dioxide, water mist.

Unsuitable extinguishing media: do not use a strong stream of water. *

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products in the event of fire: Carbon monoxide. Other toxic gases. *

5.3 Advice for fire fighters

Protection during firefighting: Do not intervene without appropriate protective equipment. Self-contained, breathing apparatus. Compete protective clothing. *

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

6.1.1. For personnel non taking part in emergency procedures*:

Eliminate ignition sources. Provide sufficient ventilation of the room. Avoid direct contact with the released substance. Avoid contact with skin and eyes. Personal protection measures – see section 8 of the Sheet.

6.1.2. For personnel taking part in emergency procedures*:

Protective equipment: Do not intervene without appropriate protective equipment. See section 8.

6.2. Environmental precautions

Avoid release to the environment. Prevent from entering surface water and sewage system. Do not allow the product to enter groundwater, water reservoirs or sewage systems, even in small quantities. *

6.3 Methods and materials for containment and cleaning up

Preventing the spread of contamination: Cover the spilled product with a non-combustible material such as sand, earth, vermiculite. Collect the product mechanically. *

6.4 Reference to other sections

Personal protection measures - see section 8 of the Sheet. Disposal considerations - see section 13 of the Sheet.

SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

Precautions for safe handling: Provide good ventilation of the workplace. Keep away from heat sources, hot surfaces, sources of sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Wear personal protection measures. *

Hygiene recommendations: Wash contaminated clothes before using them again. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink and smoke when using the product. Wash hands after each contact with the product. *

7.2 Conditions for safe storage, including any incompatibilities

Technical measures: Ground/bond container and receiving equipment.

Storage conditions: Store in a well-ventilated place. Keep cool. Keep container tightly closed. *

7.3 Special end use (s)

No further data available. *

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

8.1.1. National values of the highest permissible concentrations in the work environment and biological limit values*

Styrene (100-42-5)		
Poland- The highest permissible concentration at the workplace		
Local name Styrene		
NDS (OEL TWA)	50 mg/m ³	
NDSCh (OEL STEL)	100 mg/m³	
Regulatory reference	Official Journal 2018, item 1286	

Titanium dioxide; [as a powder with 1% or more of particles with an aerodynamic diameter of ≤10 μm](13463-67-7)			
Poland- The highest permissible conc	Poland- The highest permissible concentration at the workplace		
Local name	Titanium dioxide		
NDS (OEL TWA)	10 mg/ m³ inhalable fraction		
Warning Inhalable fraction - fraction of the aerosol penetrating through the nose and mouth, which, when deposited in the respiratory tract, poses a health risk. Simultaneous determination of concentrations of the respirable crystalline silica fraction is mandatory.			
Regulatory reference	Official Journal 2018 item 1286		

8.1.2. Recommended monitoring procedures*

Monitoring method: EN 482. Exposure at workplaces – general requirements for the characteristics of chemical agents measurement procedures.

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8.1.3. Air pollutants are formed* No further data available.

8.1.4. DNEL and PNEC*

Styrene (100-42-5)	
DNEL/DMEL (Workers)	
Acute - systemic effects after inhalation	100 mg/m ³
Acute - local effects after inhalation	100 mg/m ³
Long - term systemic effects after inhalation	100 mg/m ³
Long - term local effects after inhalation	100 mg/m ³
DNEL/ DMEL (General population)	
Acute - systemic effects after inhalation	10 mg/m ³
Acute - local effects after inhalation	10 mg/m ³
Long - term systemic effects after ingestion	7.7 μg/kg body weight /day
Long - term systemic effects after inhalation	1 mg/m³
Long - term local effects after inhalation	1 mg/m³
PNEC (Water)	
PNEC (freshwater)	0.04 mg/l
PNEC (sea water)	0.04 mg/l
PNEC (Sediments)	
PNEC sediments (freshwater)	0.418 mg/kg of dry mass
PNEC sediments (sea water)	0.418 mg/kg of dry mass
PNEC (Soil)	
PNEC Soil	0.146 mg/kg of dry mass

8.1.5. Risk management* No further data available.

8.2. Exposure control

8.2.1. Technical control measures* Provide good ventilation of the workplace.

8.2.2. Personal protective equipment

Symbols of personal protective equipment*:







8.2.2.1. Eye or face protection*: Eyes protection: Safety glasses

8.2.2.2. Skin protection*:

Skin and body protection: Wear suitable protective clothes. *

Hands protection:

Hand protection					
Туре	Material	Breakthrough time	Thickness (mm)	Penetration	Standards
Disposable gloves	Viton® II	6 (> 480 minutes)	0.7 mm		EN 374-3
Disposable gloves	Nitrile rubber (NBR)	2 (> 30 minutes)	0.4 mm		EN 374-3

8.2.2.3. Respiratory protection*:

Respiratory protection: In case of insufficient ventilation wear suitable breathing apparatus.

Respiratory protection*:			
Equipment	Filter type	Condition	Standard
Gas mask with filter type	Filter A1/B1		EN 14387

8.2.2.4. Thermal hazards* No further data available.

8.2.3. Environmental control* Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Colour Odour Odour threshold Melting point Freezing point Boiling point Flammability (solid, gas)

Explosive properties

* liquid* beige*

no data*

characteristic, sweet*

0.43 mg/m³ styrene; vinylbenzene*

not applicable* not available* 146°C not applicable

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Explosion limits: not available*

Bottom explosion limit 1.1 vol % styrene, vinylbenzene* Top explosion limit 8.0 vol % styrene, vinylbenzene*

Flash point 30°C Auto ignition point 490°C

Breakdown point not available* not available* Kinematic viscosity not available

Dynamic viscosity 30000 - 45000 mPas Solubility (in water) very poor

n-octanol/water partition coefficient: not available* Vapour pressure

app. 7.3 hPa (20°C) styrene, vinylbenzene*

Vapour pressure at 50 °C not available* $\approx 1.95 \text{ g/cm}^{3*}$ Density not available* Relative density* Relative vapour density at 20°C not available*

Relative density of saturated vapour/air mixture 3.6 styrene, vinylbenzene*

Particle characteristics* not applicable*

9.2 Other information

9.2.1. Information with regard to physical hazard classes* No further data available.

9.2.2. Other safety features* No further data available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

The product is not reactive under normal conditions.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

May cause strong reactions with alkaline products as well as organic products, such as alcohols and amines. Hazardous polymerization may occur when exposed to high temperatures. *

10.4 Conditions to be avoided

Protect against ignition sources. Avoid the accumulation of electrostatic charges (e.g. by grounding). Protect from sunlight. Avoid high temperatures. *

10.5 Incompatible materials

Avoid contact with large amounts of organic peroxides, strong acids and bases, as well as other strong oxidants.

10.6. Hazardous decomposition products

No hazardous product shall be formed under normal conditions of storage and use. Thermal decomposition may produce: Carbon monoxide. Other toxic gases. *

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on the hazard classes defined in Regulation (EC) No 1272/2008*

Acute toxicity (oral): Not classified (based on available data the classification criteria are not met). Acute toxicity (skin): 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).

Styrene (100-42-5)	
LD50 oral, rat	5000 mg/kg Source: ECHA
LD50, skin, rat	> 2000 mg/kg Source: ECHA
LC50 inhalation - rat (vapours)	11.8 mg/l Source: ECHA
Titanium dioxide; [as a powder with 1% or more of particles with an aerodynamic diameter of ≤10 µm](13463-67-7)	
LC50 inhalation - rat (dust/mist)	> 6.82 mg/l Source: ECHA

Skin corrosion/irritation: Causes skin irritation.

Titanium dioxide; [as a powder with 1% or more of particles with an aerodynamic diameter of ≤10 µm](13463-67-7)	
pH	7 Source: ECHA

Allergic effect on airways or skin: Not classified (based on available data the classification criteria are not met). Mutagenic effect on germ cells: Not classified (based on available data the classification criteria are not met). Carcinogenic effect: Not classified (based on available data the classification criteria are not met).

Styrene (100-42-5)	
IARC Group	2B - May be carcinogenic to humans

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Titanium dioxide; [as a powder with 1% or more of particles with an aerodynamic diameter of ≤10 μm](13463-67-7)	
IARC Group	2B - May be carcinogenic to humans

Harmful effect on reproduction: Suspected of damaging the unborn child.

Specific target organ toxicity - single exposure: Not classified (based on available data the classification criteria are not met).

Specific target organ toxicity - repeated exposure: Causes damage to organs (organ of hearing) through prolonged or repeated exposure.

Styrene (100-42-5)	
Specific target organ toxicity – repeated exposure:	Causes damage to organs (organ of hearing) through prolonged or repeated
	exposure.

Aspiration hazard: Not classified (based on available data the classification criteria are not met).

11.2. Information on other hazards*

No further data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity*

Hazardous for the aquatic environment, short-time (acute): Not classified (based on available data the classification criteria are not met). Hazardous to the aquatic environment, long-term (chronic): Not classified (based on available data the classification criteria are not met). It is not easily degradable.

Styrene (100-42-5)	
LC50 - Fish [1]	10 mg/l Source: ECHA
EC50 - Crustaceans [1]	4.7 mg/l Source: ECHA
EC50 72h - Algae [1]	4.9 mg/l Source: ECHA

Titanium dioxide; [as a powder with 1% or more of particles with an aerodynamic diameter of ≤10 µm](13463-67-7)	
LC50 - Fish [1]	> 100 mg/l
EC50 72h - Algae [1]	> 50 mg/l Source: ECHA

12.2. Persistence and degradability

No further data available. *

12.3. Bioaccumulative potential

zzioi bioaccamanativo potentia		
	Styrene (100-42-5)	
	n-octanol/water partition coefficient (Log Pow):	2.95 Source: HSDB.CHemIDplus

12.4. Mobility in soil

No further data available. *

12.5. Results of PBT and $\nu P \nu B$ assessment

No data.

12.6. Endocrine disrupting properties*

No further data available.

12.7. Other hazardous effects*

No further data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Local regulations (waste): Dispose of according to applicable regulations.

Waste treatment methods: Dispose of the contents/container as directed by an authorized sorting and collection centre.

Waste water disposal recommendations: Do not discharge the product into the sewage system.

Product/packaging disposal recommendations: Dispose of the product and packaging as hazardous waste. Do not dispose of with household waste. After cleaning, recycle or dispose of at an authorized facility.

Additional information: Flammable vapours may accumulate in the container. *

European Waste Catalogue code:

08 04 09* - waste adhesives and sealants containing organic solvents or other dangerous substances

15 01 10* - packaging containing residues of or contaminated by dangerous substances (e.g. plant protection products of I and II toxicity class - very toxic and toxic)

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SECTION 14: TRANSPORT INFORMATION

According to ADR/ IMDG/ IATA:

ADR	IMDG	IATA		
14.1 UN number or ID number				
UN1866	UN1866	UN1866		
14.2. UN proper shipping name				
RESIN, SOLUTION*	RESIN SOLUTION *	RESIN SOLUTION *		
Description of the shipping document				
UN 1866 RESIN, SOLUTION, 3, III, (D/E)	UN 1866 RESIN SOLUTION, 3, III (30°C c.c.)	UN 1866 RESIN SOLUTION, 3, III		
14.3 Transport hazard class (-es)				
3	3	3		
		3		
14.4. Packaging group				
III	III	III		
14.5. Environmental hazards				
Environmentally hazardous: No	Environmentally hazardous: No Marine pollutants: No	Environmentally hazardous: No		
No further data available.				

14.6 Special precautions for users*

Road transport

Classification code (ADR):

Limited Quantities (ADR):

Special packing provisions (ADR):

Mixed Packing Regulations (ADR):

Transport category (ADR):

Special provisions for carriage – Packages:

V12

30 1866

Orange Tiles:

Tunnel restriction code (ADR):

D/E

Sea transport

Special provisions (IMDG):

Limited Quantities (IMDG):

Special packing provisions (IMDG):

EmS number (Fire):

EmS number (Spillage):

Cargo Stowage Category (IMDG):

223, 955

5 L

PP1

F-E

F-E

EmS number (Spillage):

S-E

Cargo Stowage Category (IMDG):

Air transport

No data.

14.7. Sea transport in bulk in accordance with IMO instruments* $\ensuremath{\text{N/A}}$

SECTION 15: REGULATORY INFORMATION

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

15.1.1. EU Provisions*

Annex XVII to the REACH Regulation (restriction conditions): It does not contain substances listed in Annex XVII to the REACH Regulation (restriction conditions).

Ànnex XIV to the REACH Regulation (List of Authorizations): It does not contain substances listed in Annex XIV to the REACH Regulation (List of Authorizations).

REACH Candidate List (SVHC): Contains no substances listed on the REACH Candidate List.

PIC Regulation (EU 649/2012, Prior Informed Consent): It does not contain substances listed on the PIC list (EU Regulation 649/2012 on

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the export and import of dangerous chemicals).

POP Regulation (EU 2019/1021, Persistent Organic Pollutants): It does not contain substances listed on the POP list (EU Regulation 2019/1021 on persistent organic pollutants).

Ozone Depletion Regulation (EU 1005/2009): Contains no substances listed in the ozone depleting list (EU Regulation 1005/2009 on substances that deplete the ozone layer).

Explosives Precursors Regulation (EU 2019/1148): It contains substances contained on the list of explosives precursors (EU Regulation 2019/1148 on the marketing and use of explosives precursors).

Drug Precursors Regulation (EC 273/2004): It does not contain any substance(s) listed on the list of drug precursors (Regulation EC 273/2004 on the manufacture and marketing of certain substances used for the illicit manufacture of narcotic drugs and psychotropic substances).

15.1.2. Other regulations:*

Poland:

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- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- ADR Agreement: Government Statement of February 18, 2021 on the entry into force of amendments to Annexes A and B of the European Agreement on the International Carriage of Dangerous Goods by Road (ADR), drawn up in Geneva on September 30, 1957. (Journal of Laws of 2019, , item 874).

15.2. Chemical safety assessment

Not performed.

SECTION 16: OTHER INFORMATION

Changes

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Explanation of abbreviations and acronyms:

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 Estimated acute toxicity*
BCF BCF bioconcentration factor*
BLV Quantitative limit value*

BOD Biochemical Oxygen Demand (BOD)*
COD Chemical oxygen demand (COD)*
DMEL Derived level causing minimal changes*

DNEL Derived no effect level*

EC no a number ascribed to a chemical substance in the European List of Existing Chemical Substances (EINECS), or a number in the

European Inventory of Notified Chemical Substances, mentioned in "No-longer polymers" publication (EINECS) or a number on

the list of chemicals listed in 'No-longer polymers'.

EC50 Medium effective concentration*

EN European standard*
IARC International Agency for Research on Cancer*

IATA International Air Transport Association*

IMDG International Maritime Code for Dangerous Goods*

LC50 The concentration of the substance causing the death of 50% of the population of test organisms*

LD50 The Dose causing the death of 50% of the population of test organisms*

LOAEL The lowest level at which harmful changes are observed*

NOAEC Concentration at which no adverse effects are observed*

NOAEL Dose level at which no adverse effects are observed*

NOEC Maximum Concentration at which no adverse effects are observed*

OECD Organization for Economic Cooperation and Development*

OEL Occupational exposure limit value*

PBT substance, which is Persistent, Bio-accumulative and toxic*

PNEC Predicted no-effect concentration*

RID Regulations Concerning the International Transport of Dangerous Goods by Rail.

SDS Material Safety Data Sheet STP sewage treatment plant*

ThOD Theoretical Oxygen Demand (ThOD)*

TLM Middle tolerance limit*
LZO Volatile Organic Compounds*
N.O.S. Not otherwise specified*

vPvB very Persistent and very Bio-accumulative*

ED Endocrine disrupting properties*

CAS no numerical symbol ascribed to a chemical substance by the American organization Chemical Abstracts Service (CAS).

MPC maximum permissible concentration of health hazardous substances in the work place

MPIC Maximum Permissible Instantaneous Concentration.

NDSP Maximum Permissible Ceiling Concentration.

PBC Permissible concentration in biological material

UN number four-digit identification number of a substance, preparation or product pursuant to UN model regulations

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Data sources: ECHA (European Chemicals Agency).

Directions for training: Use in accordance with health and safety rules and safety procedures.

Full text of hazard statements mentioned in section 2 - 15 of the Sheet:

Acute Tox. Acute toxicity (after inhalation), category 4 4

Carc. 2 Carcinogenicity, cat. 2

EUH211 Warning! Hazardous respirable droplets may form if sprayed. Do not breathe spray or vapour.

Eye Irrit. 2 Serious eye damage/eye irritation, hazard cat 2

Flam. Liq. 3 Flammable liquids, cat. 3. Flammable liquid and vapour. H226

H315 Causes skin irritation. Causes eve irritation. H319 H332 Harmful if inhaled.

H351 Suspected of causing cancer.

Suspected of damaging the unborn child. H361d

H372 May cause damage to organs through prolonged or repeated exposure.

Repr. 2 Reproduction toxicity, hazard category 2. Skin corrosion/irritation, cat. 2.

Specific target organ toxicity - repeated exposure, cat. 1. STOT RE 1

Classification and procedure used to determine the classification of mixtures according to the Regulation (EC) 1272/2008[CLP]*:

Flam. Liq. 3 H226 Based on research results

Skin Irrit. 2 H315 Calculation method Eye Irrit. 2 H319 Calculation method Repr. 2 H361d Expert assessment STOT RE 1 H372 Calculation method

The information provided is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. Therefore, they should not be understood as a quarantee of any specific product properties.

Changes compared to the previous sheet:

Update of sections:

Skin Irrit. 2

1: added subsections 1.2.1., 1.2.2.

1: added subsections 6.1.1., 6.1.2.

8: added subsections 8.1.1., 8.1.2., 8.1.3., 8.1.4., 8.1.5., 8.2.1., 8.2.2. (and other subsections), 8.2.3.

9: added subsections 9.2.1., 9.2.2.

11: rewording of sub-section 11.1: Information on the hazard classes defined in Regulation (EC) No 1272/2008

12: new subsection 12.6: Endocrine disrupting properties.

14: rewording of sub-section 14.7: Sea transport in bulk in accordance with IMO instruments.

15: added subsections 15.1.1, 15.1.2.

Changes in the content of sections (marked with the symbol: *):

1.1, 1.2, 2.1, 2.2, 2.3, 3.2, 4.1, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 7.2, 7.3, 8.1, 8.2, 9.1, 9.2, 10.3, 10.4, 10.5, 10.6, 11.1, 11.2, 12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7, 13.1, 14.2, 14.6, 14.7, 15.1, 16.

General update.

Sheet number: 00-0P1L-0223-V6