

ACRYLIC PPRIMER S-5000 4:1

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

1.1. Product identification

ACRYLIC PPRIMER S-5000 4:1
UFI: F0W0-X0Y8-W00P-FGQJ

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

Component "A" for acrylic primer of very good filling properties.*
For professional use in car refinish.

1.3. Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.
Ul. Łódzka 3
42-240 Rudniki k. Częstochowy, PL

Tel.: +48 34 329 45 03
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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

The mixture was classified as hazardous according to the regulations in force - see section 15 of the Safety Data Sheet.

Classification 1272/2008/EC:

Flam. Liq. 3 Flammable liquid and vapour, cat. 3, H226. Flammable liquid and vapour.
Skin Irrit. 2 Causes skin irritation, cat. 2, H315. Causes skin irritation.
Eye Irrit. 2 Eye irritation, cat. 2, H319. Causes serious eye irritation.
STOT RE 2 Specific target organ toxicity – repeated exposure, cat. 2, H373. May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Contains:
Xylene
Methyl methacrylate. May cause an allergic reaction.*

Pictograms:



GHS02 GHS07 GHS08*

Signal word: **Warning.**

Hazard statements (CLP)*:

H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes eye irritation.*
H373 May cause damage to organs through prolonged or repeated exposure.*

Precautionary statements (CLP)*:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe mist/vapours/spray.*
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P314 Get medical advice/attention if you feel unwell.*
P403+P235 Store in a well-ventilated place. Keep cool.*
P501 Dispose of contents/container to: landfill for hazardous substances.*

Additional information on the label*:

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

2.3 Other hazards

No data.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures*

Substance name
Concentration [% weight]
Identification numbers
Classification and labelling

Butyl acetate

13-18% *
EC: 204-658-1
CAS: 123-86-4
Index no: 607-025-00-1
Registration no: 01-2119485493-29-XXXX
Classification 1272/2008/EC:
Flam. Liq. 3, H226; STOT SE 3, H336; EUH066.

Xylene

13-18% *
EC: 215-535-7
CAS: 1330-20-7
Index no: 601-022-00-9
Registration no: 01-2119488216-32-XXXX
Classification 1272/2008/EC:
Flam. Liq. 3, H226; Acute Tox. 4, H332; Acute Tox. 4, H312; Skin Irrit.2, H315.

Titanium dioxide*

0-9%
EC: 236-675-5
CAS: 13463-67-7
Index no: -
Registration no: 01-2119489379-17-0004
Classification 1272/2008/EC:
Carc. 2 H351 (inhalation).

Ethylbenzene*

<5 %
EC: 202-849-4
CAS: 100-41-4
Index no: 601-023-00-4
Registration no: 01-2119489370-35-xxxx
Classification 1272/2008/EC:
Flam. Liq. 2, H225, Acute Tox. 4 H332, STOT RE 2, H373, Asp. Tox. 1, H304

Methyl methacrylate*

<0.3 %
EC: 203-625-9
CAS: 80-62-6
Index no: 606-021-00-7
Registration no: 01-2119471310-51-xxxx
Classification 1272/2008/EC:
Flam. Liq. 2, H225, STOT SE 3, H335, Skin Irrit. 2, H315, Skin Sens. 1B, H317.

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: Move the injured to fresh air, keep calm, if there is no breath apply artificial respiration. Call a doctor.

Alimentary tract: Rinse mouth with water. Do not give anything to an unconscious person to swallow. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Call for medical help.

Eyes: Remove contact lenses. Rinse with plenty of water with the eyelid held wide open, avoiding a strong water jet. If necessary consult an ophthalmologist.

Skin: Take off contaminated clothes and shoes. Wash skin with plenty of water and soap. Seek medical attention if skin irritation occurs.

4.2. Most important symptoms both acute and delayed

High doses of vapours may cause: dizziness, drowsiness, headache, loss of consciousness.*

Repeated exposure may cause skin dryness or cracking.

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

Symptomatic treatment. First aiders should wear medical gloves.*

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing powder, foam resistant to alcohol, carbon dioxide, water mist.

Do not use: a strong jet of water.*

5.2. Special hazards arising from the substance or mixture

As a result of a fire, carbon monoxide and other toxic gases are generated.
 Vapours of the product form explosive mixtures with air.*
 Flammable liquid and vapour.*

5.3. Advice for fire fighters

Use independent self-contained breathing apparatus and full protective clothing. Tanks exposed to high temperature should be cooled with water from a safe distance and, if possible, removed from the endangered area. Prevent fire-fighting water from entering surface water or groundwater.*

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

Eliminate ignition sources. Avoid breathing vapour / mist / spray. Provide adequate ventilation. Avoid contamination of eyes, skin and clothing. Wear protective clothing and equipment. Hazardous area, vapours can move along the floor to distant sources of ignition and create a flashback hazard.*

6.2. Environmental precautions

Prevent from entering sewage system, surface water, ground water and soil. In the event of serious contamination of a watercourse, sewage system or soil, notify the appropriate administrative and control authorities and rescue organizations.*

6.3. Methods and materials for containment and cleaning up

Eliminate the source of the leak. Collect small spills with non-combustible absorbent material. Collect large spills mechanically. Collect contaminated soil.*

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

Avoid open flames and high temperature. Work in well-ventilated rooms. Do not breathe vapours or spray. Avoid contamination of eyes, skin and clothing. Do not eat or drink at the site where the product is used. Wash hands before each break and at the end of work. Observe the rules of personal hygiene.*
 Use personal protection measures – see section 8 of the Sheet.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed, original containers in a well-ventilated place at a temperature of 5-35°C. Away from sources of fire and heat.*

7.3 Special end use (s)

For professional use in car refinish taking into consideration the information included in subsections 7.1 and 7.2 of the Sheet.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

Maximum permissible concentrations*:

SUBSTANCE	CAS	MPC (mg/m ³)	MPIC (mg/m ³)	MPCC (mg/m ³)	Remarks: Labelling the substance with notation 'skin'**
Butyl acetate	123-86-4	240	720	-	-
Xylene	1330-20-7	100	200	-	Skin
titanium dioxide (inhalable fraction)	13463-67-7	10	-	-	-
Ethylbenzene	100-41-4	200	400	-	Skin

** Labelling the substance with the notation "skin" means that the absorption of the substance through the skin may be just as important as for inhalation exposure.

CAS NUMBER:	ABSORBED SUBSTANCE	MARKED SUBSTANCE	BIOLOGICAL MATERIAL	PCB VALUES
1330-20-7	Xylene	Methyl hippuric acid	Urine**	0,75 g/g creatinine

**The sample is collected once, at the end of the daily exposure on any given day.

DNEL values*:

Butyl acetate	DNEL values:	Workers	Skin	Long-term exposure	7 mg/kg bw day
	DNEL values:	Workers	After inhalation:	Long-term exposure	48 mg/m ³
	DNEL values:	Consumers	Skin	Long-term exposure	3.4 mg/kg bw day
	DNEL values:	Consumers	After inhalation:	Long-term exposure	12 mg/m ³
	DNEL values:	Consumers	Ingestion:	Long-term exposure	3.4 mg/kg bw day
Xylene	DNEL values:	Workers	Skin	long-term exposure - systemic effects	212 mg/kg bw day
	DNEL values:	Workers	After inhalation:	Acute exposure - local effects	442 mg/m ³
	DNEL values:	Workers	After inhalation:	Acute exposure - systemic effects	442 mg/m ³
	DNEL values:	Workers	After inhalation:	Long-term exposure - local effects	221 mg/m ³
	DNEL values:	Workers	After inhalation:	Long-term exposure - systemic effects	221 mg/m ³
	DNEL values:	Consumers	Ingestion:	Long-term exposure - systemic effects	12.5 mg/kg bw day
	DNEL values:	Consumers	Skin	Long-term exposure - systemic effects	125 mg/kg bw day
	DNEL values:	Consumers	After inhalation:	Acute exposure - local effects	260 mg/m ³
	DNEL values:	Consumers	After inhalation:	Acute exposure - local effects	260 mg/m ³

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Ethylbenzene	DNEL values:	Consumers	After inhalation:	Acute exposure - systemic effects	260 mg/m ³
	DNEL values:	Consumers	After inhalation:	Long-term exposure - local effects	65.3 mg/m ³
	DNEL values:	Consumers	After inhalation:	Long-term exposure - systemic effects	65.3 mg/m ³
	DNEL values:	Workers	Skin	Long-term exposure - systemic effects	180 mg/kg bw day
	DNEL values:	Workers	After inhalation:	Acute exposure - local effects	293 mg/m ³
	DNEL values:	Workers	After inhalation:	Long-term exposure - systemic effects	77 mg/m ³
Methyl methacrylate	DNEL values:	Consumers	After inhalation:	Long-term exposure - systemic effects	15 mg/m ³
	DNEL values:	Consumers	Ingestion:	Long-term exposure - systemic effects	1.6 mg/kg bw day
	DNEL values:	Workers	After inhalation:	Long-term exposure	208 mg/m ³
	DNEL values:	Consumers	After inhalation:	Long-term exposure	104 mg/m ³
	DNEL values:	Workers	Skin	Long-term exposure	13.67 mg/kg/day
	DNEL values:	Consumers	Skin	Long-term exposure	8.2 mg/kg/day
	DNEL values:	Consumers	Oral	Long-term exposure	0.83 mg/kg/day
	DNEL values:	Workers	Skin	Long-term exposure	1.3 mg/kg/day
DNEL values:	Consumers	Skin	Long-term exposure	0.83 mg/kg/day	
DNEL values:	Workers	After inhalation:	Long-term exposure	4.9 mg/m ³	

PNEC values*:

Butyl acetate	PNEC values:	Fresh water	0.18 mg/l
	PNEC values:	sea water	0.018 mg/l
	PNEC values:	Intermittent release:	0.36 mg/l
	PNEC values:	Biological sewage treatment plant	35.6 mg/l
	PNEC values:	Sediment (fresh water)	0.981 mg/kg
	PNEC values:	Sediment (sea water)	0.0981 mg/kg
Xylene	PNEC values:	Soil	0.0903 mg/kg
	PNEC values:	Fresh water	0.327 mg/l
	PNEC values:	sea water	0.327 mg/l
	PNEC values:	Sediment (fresh water)	12.46 mg/kg d. m. of sediment
	PNEC values:	Sediment (sea water)	12.46 mg/kg d. m. of sediment
	PNEC values:	Biological sewage treatment plant	6.58 mg/dm ³
Ethylbenzene	PNEC values:	Soil	2.31 mg/kg d. m. of soil
	PNEC values:	Fresh water	0.1 mg/l
	PNEC values:	sea water	0.01 mg/l
	PNEC values:	Sediment (fresh water)	13.7 mg/kg d. m. of sediment
	PNEC values:	Sediment (sea water)	1.37 mg/kg d. m. of sediment
	PNEC values:	Biological sewage treatment plant	9.6 mg/dm ³
Methyl methacrylate	PNEC values:	Soil	2.68 mg/kg d. m. of soil
	PNEC values:	sea water	0.94 mg/l
	PNEC values:	Sewage treatment plant	10 mg/l
	PNEC values:	Soil	1.47 mg/kg
	PNEC values:	sea water	0.482 mg/l
	PNEC values:	Biological sewage treatment plant	10 mg/l
PNEC values:	Soil	0.476 mg/kg	

8.2. Exposure control

Technical control measures*: General and local exhaust ventilation. Explosion-proof electrical installation.

Personal protective measures:

Eye or face protection: Protective goggles / tight safety glasses.

Skin protection: Protective gloves resistant to solvents, e.g. polyethylene nylon (thickness >0.062 mm, penetration time > 480 min.). As the product is a mixture consisting of several substances, the resistance of the materials from which the gloves are made cannot be calculated in advance and should therefore be checked before use. Information about the penetration time of the substance should be obtained from the glove manufacturer.* Appropriate work clothes.

Respiratory protection*: In the absence of adequate ventilation, when exposed to concentrations of vapours exceeding the limit values, it is recommended to use a full face mask with a cassette for organic vapours, filter type A. Other types of respiratory protective equipment may be used, based on the user's risk assessment.

Environmental control Prevent the product from entering into sewage system, water and soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties*

Physical state	liquid
Colour	according to specification
Odour	characteristic*
Melting/freezing point	no data available*
Boiling point	120°C*
Flammability of the product	flammable liquid*
Bottom and top explosion limit	bottom 1.2 vol. %, top 15 vol. % (Butyl acetate)*
Flash point	24°C
Auto ignition point	no data available*
Breakdown point	no data available*
pH	no data available*
Viscosity	not applicable*
Solubility (in water)	insoluble*
n- octanol/water partition coefficient	2.3 (butyl acetate)*

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Vapour pressure	15 hPa (20°C) (butyl acetate)*
Density	< .,65 g/cm ³ (20°C)*
Relative vapour density	no data available*
Particles characteristics	no data available*

9.2 Other information

No data.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data.*

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

No data.*

10.4. Conditions to be avoided

High temperatures, heat sources.*

10.5 Incompatible materials

No data.*

10.6. Hazardous decomposition products

As a result of thermal decomposition, carbon dioxide carbon monoxide and other toxic gases are generated.*

SECTION 11: TOXICOLOGICAL INFORMATION

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

No experimental data available on the preparation. The assessment was based on the data concerning the hazardous components included in the product.

a) Acute toxicity*

Xylene	
LD50 (rat, oral)	> 2000 mg/kg*
LC50 (rat, inhalation)	> 20 mg/l/ 4h*
LD50 (skin, rabbit)	> 2000 mg/kg*

Butyl acetate	
LD50 (rat, oral)	10760 mg/kg*
LC50 (rat, inhalation)	23.4 mg/l h*
LD50 (rabbit, skin)	> 14000 mg/kg*

Ethylbenzene*	
LD50 (rat, oral)	> 3500 mg/kg
LC50 (rat, inhalation)	> 17.2 mg/l/ 4h
LD50 (rabbit, skin)	> 15400 mg/kg

Methyl methacrylate*	
LD50 (rat, oral)	8400 mg/kg
LD50 (rabbit, skin)	> 35000 mg/kg
LC50 (rat, inhalation)	7093 mg/l/4h

ATE_{mix} values*:

ATE_{mix} (oral) >2000 mg/kg body weight

ATE_{mix} (skin) >2000 mg/kg body weight

ATE_{mix} (inhalation) >20 mg/l

The ATE_{mix} values have been calculated using the appropriate conversion factor in Table 3.1.2. from Regulation 1272/2008/EC, as amended.

The mixture is not classified as acute toxicity. No data confirming the hazard.

b) Skin corrosion/irritation

Causes skin irritation.

c) Serious eye damage/eye irritation

The mixture is classified as causing eye irritation.*

d) Allergic effect on airways or skin

The mixture is not classified as causing skin sensitization. No data confirming the hazard class.*

e) Mutagenic effect on germ cells

The mixture is not classified as mutagenic. No data confirming the hazard class.

f) Carcinogenicity

The mixture is not classified as carcinogenic. No data confirming the hazard class.

g) Harmful effect on reproduction

The mixture is not classified as having harmful effect on reproduction. No data confirming the hazard class.

h) Specific target organ toxicity – single exposure

The mixture is not classified as toxic to target organs – single exposure.*

i) Specific target organ toxicity – repeated exposure

The mixture is classified as toxic to target organs – repeated exposure.*

j) Aspiration hazard

The mixture is not classified as causing aspiration hazard. No data confirming the hazard.*

11.2. Information on other hazards*

No data.

SECTION 12: ECOLOGICAL INFORMATION

No experimental data available on the preparation. The assessment was based on the data concerning the hazardous components included in the product.

12.1. Toxicity*

Butyl acetate:

Ecotoxicity to fish (Pimephales promelas)	LC50 18 mg/l/96h
Ecotoxicity for invertebrates (Daphnia sp.)	EC50 44 mg/l/48h
Ecotoxicity to algae	NOEC 200 mg/l/72h
Ecotoxicity to activated sludge (Tetrahymena pyriformis)	IC50 356 mg/l/40h

Xylene:

Acute toxicity to fish (Pimephales promelas)	LC50 16.1 mg/l/96h
Acute toxicity to fish (Oncorhynchus mykiss)	LC50 2.6 mg/l/96h
Acute toxicity to aquatic invertebrates (Daphnia magna)	EC50 3.82 mg/l/48h
Acute toxicity to algae	EC50 2.2 mg/l/73h

Ethylbenzene:

Toxicity to fish (Pimephales promelas)	LC50 49 mg/l/96h
Acute toxicity to aquatic invertebrates (Daphnia magna)	EC50 184 mg/l/24h

Methyl methacrylate:

toxicity to fish	LC50 243-275 mg/l/96h
toxicity to invertebrates	EC50 69 mg/l
toxicity to algae	EC50 170 mg/l

12.2. Persistence and degradability

Xylene– biodegradable.*

12.3. Bioaccumulative potential

Xylene*:

Bioconcentration factor: BCF = 7.4 – 18.5

12.4. Mobility in soil

Butyl acetate – log Koc: 1.27 (20°C) *

ethylbenzene - distribution between environmental compartments: log Koc: 3.12 *

12.5. Results of PBT and vPvB assessment

No data.

12.6. Endocrine disrupting properties*

No data.

12.7. Other hazardous effects*

No data.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Used packaging and waste product should be delivered to authorised companies.*

Dispose of according to applicable local and official waste regulations – see section 15.

Product remains:

Waste code: 08 01 11 - Waste paints and varnishes containing organic solvents or other dangerous substances.*

Do not discharge the product into the sewage system. Must not be disposed of with municipal waste. Remove the remains of the mixture carefully and harden with the use of the proper B component, a (waste) hardener from the set. Hardened product is not a hazardous waste.

CAUTION: harden the remains in small portions away from flammable products. High amounts of heat are released during chemical reaction!

Contaminated packaging:

Packaging containing unhardened product remains is hazardous waste. Must not be disposed of with municipal waste. Contaminated container should be handed over to entities, which are authorized to collect, recover or dispose of wastes.

Waste code: 15 01 10 - Packaging containing residues of or contaminated by dangerous substances (e.g. pesticides of I and II class of toxicity – very toxic or toxic).*

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number*

1263

14.2. UN proper shipping name

PAINT

14.3. Transport hazard class (-es)

3

Classification code*: F1

Warning label * No 3



14.4 Packaging group

III

14.5. Environmental hazards

No.

14.6. Special precautions for users

Not applicable.*

14.7. Sea transport in bulk in accordance with IMO instruments*

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) NR 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 Commission Regulation (EC) 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 as amended.
- Regulation (EC) NR 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 as amended.
- Government Statement of 26 July 2005 on the entry into force of amendments to Annexes A and B to the European Agreement on the International Carriage of safe Goods by Road (ADR) drawn up in Geneva on September 30, 1957.

15.2 Chemical safety assessment

Not performed.

SECTION 16: OTHER INFORMATION

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

Flam. Liq. 2 Flammable liquids, cat. 2
H225 Highly flammable liquid and vapour
Flam. Liq. 3 Flammable liquids, cat. 3
H226 Flammable liquid and vapour
Asp. Tox 1 Aspiration hazard, cat. 1
H304 May be fatal if swallowed and enters airways.
Acute Tox. 4 Acute toxicity, cat. 4
H312 Harmful in contact with skin.
H332 Harmful if inhaled.
Skin Irrit. 2 Skin irritation, cat. 2
H315 Causes skin irritation
Eye Irrit. 2 Eye irritation, cat. 2
H319 Causes eye irritation
STOT SE 3 Specific target organ toxicity – single exposure, cat. 3
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness
STOT RE 2 Specific target organ toxicity – repeated exposure, cat. 2

H373 May cause damage to organs
EUH066 Repeated exposure may cause skin dryness or cracking

Explanation of abbreviations and acronyms used in the MSDS:*

EC reference number used in the European Union to identify hazardous substances, in particular those registered in the European Inventory of Existing Chemical Substances (EINECS), or in European List of Notified Chemical Substances (ELINCS) or the list of chemicals listed in 'No-longer polymers'.

CAS a number assigned to a chemical substance in Chemical Abstracts Service

UVBC Substances of unknown or variable composition, complex reaction products or biological materials.

MPC maximum permissible concentration at the workplace - the highest permissible weighted average concentration, whose impact on the employee during 8 hours of work, throughout the entire period of his professional activity, should not cause changes in his state of health and the state of health of his future generations.

MPIC maximum permissible instantaneous concentration - the maximum permissible instantaneous concentration set as an average value that should not cause negative changes in the state of health of the worker and the state of health of his future generations, if it persists in the work environment for no more than 30 minutes during a shift.

MPPC concentration value which, due to the threat to the employee's health or life, cannot be exceeded in the work environment at any time.

vPvB substance, which is very Persistent and very Bio-accumulative

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

DL50 lethal dose - the dose at which deaths of 50% of test animals are observed over a specified period of time

CL50 lethal concentration - the concentration at which deaths of 50% of the test animals are observed over a specified period of time

CE50 effective concentration - the effective concentration of the substance causing a response at 50% of the maximum value

DNEL no-harmful level for human health - the level of exposure to a substance not harmful to human health

PNEC predicted no-effect concentration - the concentration of the substance below which no harmful effects for the environment are expected

PBC permissible concentration in biological material - the highest permissible level of a specific factor or its metabolite in the relevant biological material or the highest permissible value of an appropriate indicator determining the impact of a chemical agent on the body.

BCF bioconcentration factor - the ratio of the concentration of a substance in the body to its concentration in water at equilibrium

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road

UN number four-digit material identification number in the UN Hazardous Materials List, derived from the UN Model Regulations, to which the individual material, mixture or object is classified

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

IMDG International Maritime Dangerous Goods Code

IATA International Air Transport Association.

Classification was made using the calculation method in accordance with the classification rules contained in Regulation No. 1272/2008 / EC

Other data sources:

ECHA European Chemicals Agency
TOXNET Toxicology Data Network

Remarks:

The product described in the safety data sheet should be stored and used in accordance with good industrial practice and in accordance with all legal regulations. The information and recommendations contained in the safety data sheet are based on our general experience and our latest knowledge, and have been presented in good faith. No part of this publication can be treated as guarantee, warranty or position directly, indirectly or otherwise. In all cases, it is the user's responsibility to determine and verify that the information and recommendations are accurate, sufficient and relevant to the particular case.

The user is responsible for creating the conditions for the safe use of the product and he is responsible for the consequences of incorrect use of this product.

Changes in the Sheet:

Update of sections:

9: rewording of sub-section 9.1: Information on basic physical and chemical properties

11: rewording of sub-section 11.1: Information on the hazard classes defined in Regulation (EC) No 1272/ 2008: added subsection 11.2. Information on other hazards

12: new subsection 12.6: Endocrine disrupting properties.

14: rewording of sub-section 14.1: UN number or ID number; rewording of sub-section 14.7: Sea transport in bulk in accordance with IMO instruments.

Changes in the content of sections:

1.1, 2.2, 3.2, 4.2, 4.3, 5.1, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 7.2, 8.1, 8.2, 9.1, 10.1, 10.3, 10.4, 10.5, 10.6, 11.1, 11.2, 12.1, 12.2, 12.3, 12.4, 12.6, 12.7, 13.1, 14.1, 14.3, 14.6, 14.7, 15.1, 16.

General update.

Sheet number: 02-0P3L-0123-V2