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

1.1. Product ID
3:1 ACRYLIC PRIMER HARDENER HS PROFESSIONAL UFI:
8JD0-U0QT-S00M-D1TX

1.2. Identified uses of the substance or mixture that are relevant and uses not recommended
Use of the substance/mixture: Hardener (component B) for acrylic primer. For professional use in car repainting.
Use not recommended: No further information.

1.3. Details of the safety data sheet provider

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

Phone: +48 34 329 45 03
Registration number: 000029202

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

Distributor : Ada Color Ltd. 176
Brezovsko Shose Street, 4003
Plovdiv, Bulgaria
Mobile: +359896663052
Tel: +35932940456
Fax:+35932940457
web: adacolor-bg.com

1.4. Emergency phone number
112 (general emergency number), 998 (fire brigade), 999 (ambulance)
+48 34 329 45 03 (from 8.00 to 15.00)
Further information: Bulgaria:
Toxicology Clinic at the Ni.I. Pirogov Hospital for Active
Treatment of Sick Patients Emergency Phone:
+359 02 9154 409 (during standard working hours except Saturday and Sunday)
+359 02 9154 346 (continuous service)

SECTION 2: DESCRIPTION OF HAZARDS

2.1. Classification of the substance or mixture
The mixture is classified as hazardous in accordance with the applicable regulations – see section 15 of the safety data sheet.

Classification according to Regulation (EC) No 1272/2008 [CLP]:
Flammable liquids, cat. 3*, H226
Acute toxicity (after exposure by inhalation: dust, mist), cat. 4 H332*
Corrosiveness/skin irritation, cat. 2, H315
Skin sensitization, cat. 1, H317
STW (Specific Organ Toxicity) – Single exposure 3, narcotic effect, H336
STW (Specific Organ Toxicity) – Single exposure 3, Irritation of the respiratory tract, H335 Full text of the H- and EUH statements: see

section 16

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

2.2. Elements of the label
Labelling according to Regulation (EC) No 1272/2008 [CLP]
Contains xylene. Icons:

ion.

Hazard Warnings (CLP):
H226 Flammable liquid and vapors.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction. H332 Harmful by inhalation.
H335 May cause irritation of the respiratory tract. H336 May cause drowsiness or dizziness.

Safety Recommendations (CLP):
P210 Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. Smoking is prohibited.
P261 Avoid inhalation of fumes/aerosols
P271 Use only outdoors or in a well-ventilated area.
P280 Use protective gloves/protective clothing/safety goggles/protective face mask. P312 If you are unwell, call the POISON CENTER/doctor.

List of EUH phrases:
EUH204 Contains isocyanates. It can cause an allergic reaction.

Additional information:
As of August 24, 2023, appropriate training prior to industrial or professional use is required.

2.3. Other hazards

Other hazards that do not lead to classification:
It can cause violent reactions with alkaline products, as well as with organic products such as alcohols or amines. Reacts with water to form gases or heat and overpressure; container rupture. Polymerizes when heated: pressure build-up can cause closed containers to rupture.

It does not contain PBT/vPvB substances ≥0,1% assessed in accordance with Annex XIII to REACH.

The mixture does not contain substances listed in accordance with Article 59(1) of the REACH Regulation due to its endocrine disruptor properties nor is it identified as an endocrine disruptor in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 % by weight.

SECTION 3: COMPOSITION/INGREDIENT INFORMATION

3.1. Substances
Not applicable.

3.2. Mixtures*

Name	Product ID	%	Classification according to Regulation (EC) No 1272/2008 (CLP)
Xylene substance with a Community-determined maximum concentration in the working environment (note C)	CAS Number: 1330-20-7 EC number: 215-535-7 Index number: 601-022-00-9 REACH-No: 01-2119488216-32	27-32*	Flam. Liq. 3 H226; Acute Tox. 4 (кожа), H312 (ATE=1100 mg/kg телесно тегло)*; Acute Tox. 4 (вдишване); H332, (ATE=1.5 mg/l/4h)*; Skin irritation. 2 H315
Butyl acetate substance with a Community-defined maximum concentration in the working environment	CAS Number: 123-86-4 EC number: 204-658-1 Index number: 607-025-00-1 REACH-No: 01-2119485493-29	25-30*	Flam. Liq. 3; H226; STOT SE 3; H336; EUH066*
Hexamethylene-1,6-diisocyanate homopolymer	CAS Number: 28182-81-2 EC number: 931-274-8 REACH-No: 01-2119485796-17	20–25*	Acute Tox. 4 (вдишване), H332; Skin Sens. 1, H317; STOT SE 3, H335
1-methoxy-2-propyl acetate substance with a Community-defined maximum concentration in the working environment *	CAS Number: 108-65-6 EC number: 203-603-9 Index number: 607-195-00-7 REACH-No: 01-2119475791-29	15–20*	Flam. Liq. 3; H226;
ethylbenzene; Phenyl ethane * substance with a Community-defined maximum concentration in the working environment	CAS Number: 100-41-4 EC number: 202-849-4 Index number: 601-023-00-4 REACH-No: 01-2119489370-35	< 1	Flam. Liq. 2, H225; Acute Tox. 4 (Wdychać), H332 (ATE=1,5 mg/l/4h); STOT RE 2, H373; Asp. Tox. 1, H304
Hexamethylene diisocyanate (Note 2)	CAS Number: 822-06-0 EC number: 212-485-8 Index number: 615-011-00-1 REACH-No: 01-2119457571-37	< 0.1*	Acute Tox. 3 (вдишване), H331 (ATE=0.5 mg/l/4h)*; Eye irritation. 2, H319; STOT SE 3, H335; Skin irritation. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317

Specific concentration limits*:

Name	Product ID	Specific concentration limits
hexamethylene diisocyanate	CAS Number: 822-06-0 EC Number: 212-485-8 Zip code: 615-011-00-1 Registration number: 01-2119457571-37-XXXX	(0.5 ≤ C ≤ 100) Resp. Sens. 1, H334 (0.5 ≤ C ≤ 100) Skin. Sense 1, H317

Note 2: The indicated isocyanate concentration is the percentage by weight of the free monomer calculated relative to the total weight of the mixture.
Note C: Some organic matter is placed on the market as a specific isomer or as a mixture of several isomers. In this case, the supplier must indicate on the label whether the substance is a specific isomer or a mixture of isomers.

The full meaning of the hazard statements is found in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

Background: See section 11 of the Safety Data Sheet.

First aid – post-inhalation measures: If breathing is difficult, take or carry the victim to fresh air and let him rest in a position that allows him to breathe freely.*

First aid – post-skin contact measures: In case of skin contamination, immediately change all contaminated clothes and wash the contaminated skin with plenty of soap and water. Rinse the skin under running water/shower. If skin irritations or rashes occur: Seek medical attention/advice. If skin irritations persist, consult a doctor.*

First aid - measures after contact with eyes: Rinse gently with water for several minutes. Remove contact lenses, if any, and are easy to do. Continue rinsing. Call a doctor immediately. In case of contact with eyes, rinse immediately with plenty of water and seek medical attention.

First aid - post-ingestion measures: If swallowed: rinse the mouth. DO NOT induce vomiting. Call a doctor immediately.

4.2. Most significant acute symptoms and effects that occur after a certain period of time *
Symptoms/effects when inhaled: Vapors can cause drowsiness and dizziness.
Skin contact symptoms/effects: Prolonged or repeated contact may cause the skin to dry out. Symptoms/effects on eye contact: May lead to eye irritation.

4.3. Indication of the need for any emergency medical care and special treatment
Symptomatic treatment.

SECTION 5: FIRE MEASURES

5.1. Fire extinguishers
Suitable fire extinguishing agents: dust, alcohol-resistant foam, carbon dioxide, water mist. Unsuitable fire extinguishing agents: strong water jet.

5.2. Particular hazards arising from the substance or mixture
Hazardous products of decomposition in fire: Carbon monoxide. Oxides. Other toxic gases. *

5.3. Tips for firefighters
Fire extinguishing protection: Do not intervene without proper protective equipment. Independent breathing apparatus. Full protective clothing.*

SECTION 6: EMERGENCY RELEASE MEASURES

6.1. Personal Protective Equipment, Protective Equipment and Emergency Procedures

For non-emergency personnel:
Protective equipment: Remove ignition sources. Ensure adequate ventilation of the area. Avoid any direct and indirect contact with the dropped components. Avoid contact with skin and eyes. Use the necessary personal protective equipment – section 8 of the safety data sheet.*

For those responsible for emergencies:
Protective equipment: Do not intervene without proper protective equipment. See section 8.*

6.2. Environmental precautions
Avoid discharge into the environment. Do not allow it to enter surface water or sewers. Do not allow the product to get into groundwater, bodies of water or sewers, even in small quantities.

6.3. Methods and materials for restraint and cleaning *
Prevent the spread of contamination: Cover the spilled/spilled product with non-flammable material, such as sand, soil, vermiculite. Assemble the product mechanically.

6.4. Reference to other sections
Personal protective equipment – see section 8. Waste disposal – see section 13.

SECTION 7: OPERATION AND STORAGE

7.1. Safe Operation Precautions*
Ensure good ventilation in the workplace. Keep away from heat, hot surfaces, sparks, open flames, and other sources of ignition. Don't smoke. Use only outdoors or in a well-ventilated area. Wear personal protective equipment.

Hygiene recommendations:
Wash contaminated clothes before reuse. Do not take contaminated protective clothing outside the workplace. Do not eat, drink or smoke while using the product. Wash your hands after each contact with the product.

7.2. Conditions for safe storage, including incompatibilities:*

Technical measures: Ground/connect the container and receiving equipment.
Storage conditions: Store in a well-ventilated area. Store in a cool place. Keep the container tightly closed. Protect from moisture. Protect from frost.

7.3. Specific end-use(s)

No further information.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTIVE EQUIPMENT

8.1. Control parameters

National occupational exposure limits and biological limit values:

Hexamethylene diisocyanate (822-06-0)	
Poland - Maximum permissible concentrations in the workplace	
Local name	Hexan-1,6-diyl diisocyanate
NDS (OEL TWA)	0.04 mg/m³
NDSCh (OEL STEL)	0.08 mg/m³
Comment	Skin (Labelling a substance with the designation 'skin' indicates that the absorption of the substance through the skin can be just as important as by inhalation exposure).
Normative reference	SG No. R. 2018 pos. 1286
Butyl Acetate (123-86-4)	
UE - Indicative Occupational Exposure Limit Value (IOEL)	
Local name	n-Butyl acetate
IOEL TWA	50 ppm
IOEL STEL	723 mg/m³
	150 ppm
Normative reference	COMMISSION DIRECTIVE (EU) 2019/1831
Poland - Maximum permissible concentrations in the workplace	
Local name	N-Butyl Acetate
NDS (OEL TWA)	240 mg/m³
NDSCh (OEL STEL)	720 mg/m³
Normative reference	SG No. R. 2018 pos. 1286
Xylene (1330-20-7)	
UE - Indicative Occupational Exposure Limit Value (IOEL)	
Local name	Xylene, mixed isomers, pure
IOEL TWA	50 ppm
IOEL STEL	442 mg/m³
	100 ppm
Comment	Skin
Normative reference	COMMISSION DIRECTIVE 2000/39/EC
Poland - Maximum permissible concentrations in the workplace	
Local name	Xylene mixture of isomers: 1,2-; 1,3-; 1,4-
NDS (OEL TWA)	100 mg/m³
NDSCh (OEL STEL)	200 mg/m³
Normative reference	SG No. R. 2018 pos. 1286
1-methoxy-2-propyl acetate (108-65-6)	
UE - Indicative Occupational Exposure Limit Value (IOEL)	
Local name	2-Methoxy-1-methylethylacetate
IOEL TWA	50 ppm
IOEL STEL	550 mg/m³
	100 ppm
Comment	Skin
Normative reference	COMMISSION DIRECTIVE 2000/39/EC
Poland - Maximum permissible concentrations in the workplace	
Local name	2-methoxy-1-methylethyl acetate
NDS (OEL TWA)	260 mg/m³
NDSCh (OEL STEL)	520 mg/m³
Normative reference	SG No. R. 2018 pos. 1286
ethylbenzene; Phenyletane (100-41-4)	
UE - Indicative Occupational Exposure Limit Value (IOEL)	
Local name	Ethylbenzene
IOEL TWA	100 ppm
IOEL STEL	884 mg/m³
	200 ppm
Comment	Skin
Normative reference	COMMISSION DIRECTIVE 2000/39/EC
Poland - Maximum permissible concentrations in the workplace	
Local name	Etilbenzene
NDS (OEL TWA)	200 mg/m³
NDSCh (OEL STEL)	400 mg/m³
Comment	Skin (Labelling a substance with the designation 'skin' indicates that the absorption of the substance through the skin can be just as important as by inhalation exposure).
Normative reference	SG No. R. 2018 pos. 1286

Recommended monitoring procedures Monitoring method:
EN 482. Occupational exposure – General requirements for characterizing procedures for measuring chemical agents.

Formation of air pollutants* No further information available.

DNEL и PNEC*:

Hexamethylene diisocyanate (822-06-0)	
DNEL/DMEL (Employees)	
Acute - local effects, after inhalation	0.07 mg/m³
Long-term - local effects, after inhalation	0.035 mg/m³
NECP (STP)	
PNEC wastewater treatment plants	8.42 mg/l
Hexamethylene-1,6-diisocyanate, homopolymer (28182-81-2)	
DNEL/DMEL (Employees)	
Acute - local effects, after inhalation	1 mg/m³
Long-term - local effects, after inhalation	0.5 mg/m³
PNEC (Water)	
PNEC aqua (fresh water)	0.127 mg/l
PNEC aqua (sea water)	0.0127 mg/l
PNEC aqua (intermittent, fresh water)	1.27 mg/l
PNEC (Sediment)	
PNEC Sediment (Fresh Water)	266701 mg/kg dry weight
PNEC Sediment (Seawater)	26670 mg/kg dry weight
PNEC (Zemia)	
PNEC Pochvata	53183 mg/kg dry weight
NECP (STP)	
PNEC wastewater treatment plants	88 mg/l
Butyl Acetate (123-86-4)	
PNEC (Water)	
PNEC aqua (fresh water)	0.18 mg/l
PNEC aqua (sea water)	0.018 mg/l
PNEC aqua (intermittent, fresh water)	0.36 mg/l
PNEC (Sediment)	
PNEC Sediment (Fresh Water)	0.981 mg/kg dry weight
PNEC Sediment (Seawater)	0.0981 mg/kg dry weight
PNEC (Zemia)	
PNEC Pochvata	0.0903 mg/kg dry weight
NECP (STP)	
PNEC wastewater treatment plants	35.6 mg/l
Xylene (1330-20-7)	
DNEL/DMEL (Employees)	
Acute - systemic effects, after inhalation	289 mg/m³
Acute - local effects, after inhalation	289 mg/m³
Long-term - systemic effects on skin contact	180 mg/kg body weight/day
Long-term - systemic effects, after inhalation	77 mg/m³
DNEL/DMEL (Total Population)	
Acute - systemic effects, after inhalation	174 mg/m³
Acute - local effects, after inhalation	174 mg/m³
Long-term - systemic effects, after ingestion	1.6 mg/kg body weight/day
Long-term - systemic effects, after inhalation	14.8 mg/m³
Long-term - systemic effects on skin contact	108 mg/kg body weight/day
PNEC (Water)	
PNEC aqua (fresh water)	0.327 mg/l
PNEC aqua (sea water)	0.327 mg/l
PNEC aqua (intermittent, fresh water)	0.327 mg/l
PNEC (Sediment)	
PNEC Sediment (Fresh Water)	12.46 mg/kg dry weight
PNEC Sediment (Seawater)	12.46 mg/kg dry weight
PNEC (Zemia)	
PNEC Pochvata	2.31 mg/kg dry weight
NECP (STP)	
PNEC wastewater treatment plants	6.58 mg/l
1-methoxy-2-propyl acetate (108-65-6)	
DNEL/DMEL (Employees)	
Acute - local effects, after inhalation	550 mg/m³
Long-term - systemic effects on skin contact	796 mg/kg body weight/day
Long-term - systemic effects, after inhalation	275 mg/m³
DNEL/DMEL (Total Population)	
Long-term - systemic effects, after ingestion	36 mg/kg body weight/day
Long-term - systemic effects, after inhalation	33 mg/m³
Long-term - systemic effects on skin contact	320 mg/kg body weight/day
Long-term - local effects, after inhalation	33 mg/m³
PNEC (Water)	
PNEC aqua (fresh water)	0.635 mg/l
PNEC aqua (sea water)	0.0635 mg/l
PNEC aqua (intermittent, fresh water)	6.35 mg/l
PNEC (Sediment)	
PNEC Sediment (Fresh Water)	3.29 mg/kg dry weight
PNEC Sediment (Seawater)	0.329 mg/kg dry weight
PNEC (Zemia)	
PNEC Pochvata	0.29 mg/kg dry weight
NECP (STP)	
PNEC wastewater treatment plants	100 mg/l
ethylbenzene; phenyletane (100-41-4)*	
DNEL/DMEL (Employees)	
Acute - local effects, after inhalation	293 mg/m³
Long-term - systemic effects on skin contact	180 mg/kg body weight/day

Long-term - systemic effects, after inhalation	77 mg/m³
DNEL/DMEL (Total Population)	
Long-term - systemic effects, after ingestion	1.6 mg/kg body weight/day
Long-term - systemic effects, after inhalation	15 mg/m³
PNEC (Water)	
PNEC aqua (fresh water)	0.1 mg/l
PNEC aqua (sea water)	0.01 mg/l
PNEC aqua (intermittent, fresh water)	0.1 mg/l
PNEC (Sediment)	
PNEC Sediment (Fresh Water)	13.7 mg/kg dry weight
PNEC Sediment (Seawater)	1.37 mg/kg dry weight
PNEC (Zemia)	
PNEC Pochvata	2.68 mg/kg dry weight
PNEC (Oral)	
PNEC after ingestion (secondary poisoning)	0.02 g/kg food
NECP (STP)	
PNEC wastewater treatment plants	9.6 mg/l

Risk Group Management:
No further information.

8.2. Exposure control

Appropriate engineering control measures:
Ensure good ventilation in the workplace.

Personal protective equipment
Symbols for personal protective equipment:

Eye protection:
Tight-fitting safety glasses.

Skin and body protection:
Appropriate protective
clothing.

Hand protection*:

Hand protection					
Type	Material	Drilling time	Thickness (mm)	Penetration	Standard
Disposable gloves	Viton® II	6 (> 480 minutes)	0,7 mm		EN 374-3
Disposable gloves	Nitrilene rubber (NBR)	2 (> 30 minutes)	0,4 mm		EN 374-3

Airway protection:
If there is insufficient ventilation, wear a suitable breathing apparatus.

Airway protection *			
Device	Filter type	State	Standard
Gas mask with type filter	Filter A1/B1		EN 14387

Thermal hazards
No further information.

Environmental Exposure Control:
Avoid discharge into the environment.*

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties * Physical

state of liquid	
Colour	achromatic
Smell	Characteristic*
Odor threshold	0,9-9 mg/m3 (xylene)
Melting point	Not applicable
Freezing point	not available
Boiling point	126-140°C
Ignition *	Not applicable

Explosive properties	No data

Lower and upper explosive limits	bottom: 1.1% vol. xylene, upper: 8.0% vol. xylene
Flame Temperature	32°C
Self-ignition temperature	approx. 430°C
Decomposition temperature	not available
pH	not available
Kinematic viscosity	not available
Solubility (in water)	Poorly soluble **N-**
octanol/water partition coefficient available	**Vapour**
pressure14 hPa (20°C)	
Vapor pressure at 50°C	not available
Density	approx. 1 g/cm3*
Relative density	not available
Relative vapor density at 20°C	not available
Characteristics of particles	Not applicable

9.2. Other information
9.2.1. Information on physical hazard classes
There is no data.

9.2.2. Other safety features
There is no data.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
The product is not reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
The product is stable under normal conditions of use.

10.3. Possibility of dangerous reactions
It can cause strong reactions with alkaline products, as well as with organic products such as alcohols or amines. It reacts with water, forming gases or heat and overpressure: tearing the container. Polymerizes when heated: pressure build-up may cause the closed container to rupture.*

10.4. Conditions to be avoided
Protect against ignition sources. Avoid the accumulation of static electricity (e.g. by grounding). Protect from sunlight. Avoid high temperatures. Protect from moisture. Protect against frost.*

10.5. Incompatible materials
Avoid contact with: strong acids, strong bases and strong oxidizing agents. Do not come into contact with water.*

10.6. Dangerous decay products
Carbon monoxide. Oxides. Other toxic gases.*

SECTION 11: TOXICOLOGICAL INFORMATION

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

Acute toxicity (oral): Unclassified (based on available data, classification criteria not met).
Acute toxicity (via the skin): Unclassified (based on available data, the classification criteria are not met). Acute toxicity (inhalation): Inhalation: Powder, mist: Harmful by inhalation.

Product	
ATE CLP (dust, mist)	2.29 mg/l/4h

hexamethylene diisocyanate (822-06-0)	
LD50 oral, rat	710 mg/kg Source: NCIS; Toxic Substances Report
LD50 dermal, rat	> 7000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal, rabbit	599 mg/kg Source: NCIS; Toxic Substances Report
LC50 by inhalation — rat	0.124 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Results Comments: Other:, 95% CL: 111 - 140
LC50 by inhalation — rat (vapor)	0.24 mg/l Source: NCIS; Toxic Substances Report
Hexamethylene-1,6-diisocyanate homopolymer (28182-81-2)	
LD50 oral, rat	> 2500 kg body weight Animal: rat, Sex of the animal: female, Guideline: OECD Guideline 423 (Acute oral toxicity – a method for determining the acute toxicity class)
LD50, dermal, rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute dermal toxicity)
LD50 dermal, rabbit	> 2000 mg/kg body weight Animal: rabbit, Guidelines: other:
Butyl Acetate (123-86-4)	
LD50 oral, rat	12.2 ml/kg Source: ECHA
LC50 by inhalation — rat (vapor)	> 4.9 mg/l Source: ECHA
Xylene (1330-20-7)	
LD50 oral, rat	3523 mg/kg rat
LD50 dermal, rabbit	12126 mg/kg body weight Animal: rabbit, Gender: male
LC50 by inhalation — rat	27124 mg/l

1-methoxy-2-propyl acetate (108-65-6)	
LD50 dermal, rat	> 2000 mg/kg body weight Animal: rat, Sex of the animal: male, Guideline: OECD Guideline 402 (Acute dermal toxicity)
ethylbenzene; Phenyl ethane (100-41-4)*	
LD50 oral, rat	≈ 3500 mg/kg body weight Animal: rat
LD50 dermal, rabbit	> 20000 mg/kg Source: ECHA
LC50 by inhalation — rat [ppm]	4000 ppm Source: ECHA, EU Harmonised Classification under CLP

Skin corrosion/irritation: Causes skin irritation.

Butyl Acetate (123-86-4)	
pH	6.2 Temperature: 20 °C Concentration: 5.3 g/L

Serious eye damage/eye irritation: Unclassified (based on available data, classification criteria not met).

Butyl Acetate (123-86-4)	
pH	6.2 Temperature: 20 °C Concentration: 5.3 g/L

Sensensification of the respiratory tract or skin: May cause an allergic skin reaction.
Germ cell mutagenicity: Unclassified (based on available data, classification criteria not met).
Carcinogenicity: Unclassified (based on available data, classification criteria not met).

ethylbenzene; Phenyl ethane (100-41-4)	
IARC Group	2B - May be carcinogenic to humans

Reproductive toxicity: Unclassified (based on available data, classification criteria not met). **STO (Specific Organ Toxicity) – Single exposure:** May cause drowsiness or dizziness.

Hexamethylene diisocyanate (822-06-0)	
WTO (Specific Organ Toxicity) – Single Exposure	It can cause irritation of the respiratory tract.
Hexamethylene-1,6-diisocyanate homopolymer (28182-81-2)	
WTO (Specific Organ Toxicity) – Single Exposure	It can cause irritation of the respiratory tract.
Butyl Acetate (123-86-4)	
WTO (Specific Organ Toxicity) – Single Exposure	It can cause drowsiness or dizziness.

STW (specific organ toxicity) – repeated exposure: Unclassified (based on available data, classification criteria not met).

Butyl Acetate (123-86-4)	
LOAEL (oral, rat, 90 days)	500 mg/kg body weight Animal: rat, Guideline: EPA OTS 798,2650 (90-day oral toxicity in rodents)
NOAEL (oral, rat, 90 days)	125 mg/kg body weight Animal: rat, Guideline: EPA OTS 798.2650 (90-day oral toxicity in rodents)
Xylene (1330-20-7)	
LOAEL (oral, rat, 90 days)	150 mg/kg body weight Animal: rat, Sex of the animal: male, Guideline: OECD Guideline 408 (90-day oral toxicity in rodents at repeated dosing), Guideline: EPA OPP 82-1 (Oral toxicity after 90 days)
1-methoxy-2-propyl acetate (108-65-6)	
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Multiple-Dose Toxicity Study with Reproductive/Developmental Toxicity Screening Test)
NOAEL (Leather, Rat/Rabbit, 90 days)	> 1000 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 410 (Dermal toxicity after repeated application: 21/28 days)
ethylbenzene; Phenyl ethane (100-41-4)	
NOAEL (oral, rat, 90 days)	75 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (28-day multiple-dose oral toxicity study in rodents)
STW (Specific Organ Toxicity) – repeated exposure	May cause organ damage with prolonged or repeated exposure.

Inhalation hazard: Unclassified (based on available data, classification criteria not met).

Butyl Acetate (123-86-4)	
Viscosity, kinematic	0.83 mm²/s Temperature: '20°C' Parameter: kinematic viscosity (mm²/s)'

11.2. Information about other hazards
11.2.1. Endocrine disrupting properties *
The mixture does not contain substances listed in accordance with Article 59(1) of the REACH Regulation due to endocrine disrupting properties or the substance(s) have not been identified as substance(s),

endocrine disruptor(s) Endocrine disruptors according to 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%.*

11.2.2. Other information
No further information.

SECTION 12: ENVIRONMENTAL INFORMATION

12.1. Toxicity

Poses a hazard to the aquatic environment, short-term (acute) : Unclassified (based on available data, classification criteria not met)
Poses a hazard to the aquatic environment, long-term (chronic): Unclassified (based on available data, classification criteria not met)
Not in front of rapid degradation.

Hexamethylene diisocyanate (822-06-0)	
LC50 - Fish [1]	≥ 82.8 mg/l Source: ECHA
EC50 72h - Algae [1]	> 77.4 mg/l Source: ECHA
Hexamethylene-1,6-diisocyanate homopolymer (28182-81-2)	
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): other:
Butyl Acetate (123-86-4)	
LC50 - Fish [1]	18 mg/l Source: ECHA
EC50 - Crustaceans [1]	44 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	32 mg/l Test organisms (species): Artemia salina
EC50 72h - Algae [1]	674,7 mg/l Test organisms (species): Desmodesmus subspicatus (former name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	246 mg/l Тестови организми (видове): Pseudokirchneriella subcapitata (предишно наименование: Raphidocelis subcapitata, Selenastrum capricornutum)
LOEC (chronic)	47.6 mg/l Test organisms (species): Daphnia magna Period: "21 days
NOEC (chronic)	23.2 mg/l Test organisms (species): Daphnia magna Period: "21 days
Xylene (1330-20-7)	
LC50 - Fish [1]	2,6 mg/l Test organisms (species): Oncorhynchus mykiss (former name: Salmo gairdneri)
EC50 - Crustaceans [1]	> 3.4 mg/l Organisms tested (species): Ceriodaphnia dubia
NOEC for chronic toxicity to fish	> 1,3 mg/l Test organisms (species): Oncorhynchus mykiss (former name: Salmo gairdneri) Period: '56 days '
1-methoxy-2-propyl acetate (108-65-6)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustaceans [1]	> 500 mg/l Organisms (species) tested: Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Тестови организми (видове): Pseudokirchneriella subcapitata (предишно име: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	≥ 100 mg/l Organisms tested (species): Daphnia magna Period: "21 days
NOEC for Chronic Toxicity to Fish	47.5 mg/l Tested organisms (species): Oryzias latipes Duration: "14 days"
ethylbenzene; Phenyl ethane (100-41-4)*	
LC50 - Fish [1]	5.1 mg/l Organisms (species) tested: Menidia menidia
EC50 72h - Algae [1]	5.4 mg/l Тестови организми (видове): Pseudokirchneriella subcapitata (предишно име: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	4.9 mg/l Test organisms (species): Skeletonema costatum
EC50 96h - Algae [1]	3.6 mg/l Тестови организми (видове): Pseudokirchneriella subcapitata (предишно име: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [2]	7.7 mg/l Test organisms (species): Skeletonema costatum
LOEC (chronic)	1.7 mg/l Test organisms (species): Ceriodaphnia dubia Period: "7 days
NOEC (chronic)	0.96 mg/l Organisms tested (species): Ceriodaphnia dubia Period: "7 days

12.2. Stability and degradability
There is no data.

12.3. Bioaccumulative capacity

Hexamethylene diisocyanate (822-06-0)	
Partition coefficient n-octanol/water (Log Pow)	1.08 Source: HSDB
Butyl Acetate (123-86-4)	
Partition coefficient n-octanol/water (Log Pow)	1.78 Source: ICSC
ethylbenzene; Phenyl ethane (100-41-4)*	
Partition coefficient n-octanol/water (Log Pow)	3.15 Source: HSDB

12.4. Soil Transferability

Hexamethylene diisocyanate (822-06-0)	
Soil Transferability	5 – 286 Source: ECHA

12.5. PBT and vPvB Evaluation Results
There is no data.

12.6. Endocrine disrupting properties *
Adverse effects on the environment due to the properties of endocrine disruptors:
The mixture does not contain substances listed in accordance with Article 59(1) of the REACH Regulation due to their endocrine disrupting properties, or the substances have not been identified as endocrine disruptors, endocrine disruptors, 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%.*

12.7. Other adverse effects
There is no data.

SECTION 13: WASTE DISPOSAL

13.1. Waste treatment methods *
Regional waste regulations: Dispose of in accordance with applicable regulations.
Waste disposal methods: Dispose of the contents/container in accordance with the recommendations of an authorized waste sorting and collection center.
Wastewater disposal recommendations: Do not dispose of in the drain.
Recommendations for disposal of the product/packaging: Dispose of the product and packaging as hazardous waste. Do not dispose of with household waste. After cleaning, recycle or dispose of in an authorized facility.
Additional information: Flammable vapors may accumulate in the container. European Waste List (LoW, EC 2000/532): 08 05 01* - waste isocyanates
15 01 10* - Packaging containing residues of hazardous substances or contaminated with them (e.g. plant protection products from toxicity class I and II - very toxic and toxic)

SECTION 14: TRANSPORT INFORMATION

ADR	IMDG	IATA
14.1. UN List Number or Identification Number		
UN1866	UN1866	UN1866
14.2. Exact name of the UN-listed consignment		
RESIN IN SOLUTION	RESIN SOLUTION	Resin solution
Description of the transport document		
UN 1866 RESIN IN SOLUTION, 3, III, (D/E)	UN 1866 RESIN SOLUTION, 3, III (32°C c.c.)	UN 1866 Resin solution, 3, III
14.3. Transport hazard class(s)		
3	3	3
		
14.4. Packing group		
III	III	III
14.5. Environmental hazards		
Product hazardous to the environment: No	Product hazardous to the environment: No Pollution of the marine environment: No	Product hazardous to the environment: No
No further information.		

14.6. Special precautions for consumers

Road transport:

Classification Code (ADR):	F1
Limited Quantities (ADR):	5 L
Special Packaging Regulations (ADR):	PP1
Mixed packaging (ADR) provisions:	MP19
Transport category (ADR):	3
Special Provisions for Carriage - Packaging:	V12

Tunnel Restriction Code (ADR): D/E

Sea transport:

Special provisions (IMDG):	223, 955
Limited quantities (IMDG):	5 L
Special Packaging Regulations (IMDG):	PP1
EmSNo (Fire):	F-E
EmS No. (Spill):	S-E
Load Category (IMDG):	A

Air transport:
There is no data.

14.7. Maritime transport of cargo in bulk according to instruments of the International Maritime Organization
Not applicable.

SECTION 15: INFORMATION ON THE REGULATORY FRAMEWORK

15.1. Substance or mixture-specific safety, health and environmental legislation/legislation

EU regulations*:
Annex XVII to the REACH Regulation (restriction conditions): Does not contain substances listed in Annex XVII to the REACH Regulation (restriction conditions).
Annex XIV to REACH (Authorisation List): Does not contain substances listed in Annex XIV to the REACH Regulation (Authorisation List). List of substances applying for inclusion in REACH (SVHC): Does not contain substances listed in the list of substances applying for inclusion in REACH.
PIC Regulation (EU 649/2012, prior informed consent): Does not contain PIC listed substances (Regulation (EU) No 649/2012 on the export and import of hazardous chemicals).
PIC Regulation (EU 2019/1021, persistent organic pollutants): Does not contain substances included in the PIC list (Regulation (EU) 2019/1021 on persistent organic pollutants).
Ozone Layer Regulation (EC 1005/2009): Does not contain substances listed for the ozone layer (Regulation (EC) No 1005/2009 on substances that deplete the ozone layer).
Explosives Precursors Regulation (EU 2019/1148): Does not contain substances included in the list of explosives precursors (Regulation (EU) 2019/1148 concerning the placing on the market and use of explosives precursors). Drug Precursors Regulation (EC 273/2004):
It does not contain substances included in the list of drug precursors (Regulation (EC) No 273/2004 on the manufacture and placing on the market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances).

Other legal provisions:
Safety data sheet in EU format in accordance with Commission Regulation (EU) 2020/878.
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 Regulations (EEC) No 793/93 and (EC) No 1488/94, Council Directive 76/769/EEC and Commission Directive 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

15.2. Safety assessment of the chemical or mixture
It's not done.

SECTION 16: FRIEND INFORMATION

Full meaning of the hazard statements listed in sections 2-15:
Acute Tox. 3 (inhalation) Acute toxicity (after inhalation exposure)*, category 3 Acute Tox. 4 (skin)
Acute toxicity (after skin exposure)*, category 4
Acute Tox. 4 (inhalation) Acute toxicity (after inhalation exposure)*, category 4
Acute Tox. 4 (inhalation: dust, mist) Acute toxicity (after inhalation exposure: dust, mist), category 4* Asp. Tox. 1
Inhalation hazard, category 1*
EUH066 Repeated exposure may cause the skin to dry out or crack. EUH 204 Contains isocyanates.
May cause an allergic reaction.*
Eye Irrit. 2 Serious eye damage/eye irritation, Category 2 Flam. Liq. 2
Flammable liquids, category 2*
Flam. Liq. 3 Flammable liquids, category 3
H225 Highly flammable liquid and vapours.*
H226 Flammable liquid and vapours.
H304 Can be fatal if ingested and enters the respiratory tract.* H312 Harmful if in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H331 Toxic by inhalation.*
H332 Harmful by inhalation.
H334 May cause allergic or asthmatic symptoms or breathing difficulties when inhaled. H335 May cause irritation of the respiratory tract.
H336 May cause drowsiness or dizziness.
H373 May cause organ damage from prolonged or repeated exposure.* Resp. Sens. 1 Airway sensitization, category 1
Skin Irrit. 2 Corrosiveness/Skin Irritation, Category 2 Skin
Sens. 1 Skin Sensitization, Category 1
STOT RE 2 STOT (specific organ toxicity) – repeated exposure, category 2*
STOT SE 3 (specific organ toxicity) — single exposure, category 3, narcotic effect*

Abbreviations and acronyms:

DNA 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 Expected acute toxicity
BCF Factor for BCF BLV
bioconcentration Quantitative limit
value
BOD Biochemical oxygen consumption (BOD) COD
Chemical Oxygen Consumption (COD)
DMEL Derived level causing minimal DNEL change
Received level without change
EC numberEuropean Community measure EC50
Average effective concentration
IN European standard
IARC International Agency for Research on Cancer IATA
International Air Transport Association
IMDG International Maritime Dangerous Goods Organization
LC50 Concentration of a lethal substance in 50% of the test population LD50 The
dose that causes death in 50% of the test population
LOAEL Lowest level at which adverse effects are observed NOAEC Concentration
at which no adverse effects are observed NOAEL The dose at which no adverse
effects are observed
NOEC The highest concentration at which no adverse OECDs are observed
Organisation for Economic Co-operation and Development
OEL Occupational Exposure Limit Value PBT Persistent,
Bioaccumulative and Toxic Substance PNEC Suspected
Concentration Without Effect
RID Rules for the International Transport of Dangerous Goods by Rail SDS Safety
Data Sheet
STP ThOD Wastewater Treatment Plant
Theoretical Oxygen Consumption (TZT) TLM
Average limit of tolerance VOC Volatile
organic compounds
CAS номер CAS
N.O.S. Not stated otherwise
vPvB Very resistant and very bioaccumulative
AND Endocrine disrupting properties

Classification and procedure used to determine the classification of mixtures in accordance with Regulation (EC) No 1272/2008 [CLP]:

Flam. Liq. 3	H226	Based on test results
Acute Tox. 4 (Inhalation: dust, mist)	H332	Calculation method
Skin Irrit. 2	H315	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H336	Calculation method
STOT SE 3	H335	Calculation method

Other data sources: ECHA
European Chemicals Agency
TOXNET Toxicology Data Network

Changes to the data sheet compared to the previous version are marked with an asterisk *. Changes in the content of the sections:
1.2, 1.3, 1.4, 2.1, 3.2, 4.1, 4.2, 6.1, 6.3, 7.1, 7.2, 8.1, 8.2, 9.1, 9.2, 10.3, 10.5, 10.6, 11.1, 11.2, 12.1, 12.3, 12.6, 13.1, 16.
Editorial changes.

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