18.07.2023 **Kit components**

Product code	Description
352	**IJmopox HB coating set**

Components:

350	IJMOPOX HB COATING base component
351	IJMOPOX HB COATING HARDENER

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.07.2023 Version number 88 (replaces version 87) Revision: 18.07.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· Trade name: IJMOPOX HB COATING
base component

· Article number: 350
· UFI: F6D2-V0S6-X007-6DD3

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

· Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU19 Building and construction work

· Product category PC9a Coatings and paints, thinners, paint removers

· Process category PROC19 Manual activities involving hand contact
PROC7 Industrial spraying
PROC10 Roller application or brushing
PROC11 Non industrial spraying

· Environmental release category ERC5 Use at industrial site leading to inclusion into/onto article
ERC8c Widespread use leading to inclusion into/onto article (indoor)
ERC8f Widespread use leading to inclusion into/onto article (outdoor)

· Article category AC13 Plastic articles
AC7 Metal articles
AC11 Wood articles

· Application of the substance / the mixture See our technical datasheet for application details of this product.
Epoxy primer/epoxy coating

· **1.3 Details of the supplier of the safety data sheet**

· Manufacturer/Supplier: De IJssel Coatings BV, Centrumbaan 960, NL 2841 MH Moordrecht
Tel: +31 182 372177, E-mail: info@de-ijssel-coatings.nl

· Further information obtainable from: Research and Development.

· **1.4 Emergency telephone number:** De IJssel Coatings BV, Tel. +31 182 372177, E-mail: safety@de-ijssel-coatings.nl
Office hours: working days from 08:00 to 17:00 hrs.

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SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· Classification according to Regulation (EC) No 1272/2008


GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.


GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.


GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.

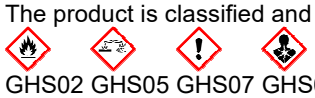

GHS07

Skin Irrit. 2 H315 Causes skin irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

· **2.2 Label elements**

· Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

· Hazard pictograms

GHS02 GHS05 GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labelling: reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)

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butanol
xylene
bis[4-(2,3-epoxypropoxy)phenyl]propane

· Hazard statements
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

· Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

* ***SECTION 3: Composition/information on ingredients***

· **3.2 Mixtures**
· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10 - 25%
CAS: 25068-38-6 NLP: 500-033-5 Index number: 603-074-00-8 Reg.nr.: 01-2119456619-26	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700) Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317, EUH205 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %	10 - 25%
CAS: 78-83-1 EINECS: 201-148-0 Index number: 603-108-00-1 Reg.nr.: 01-2119484609-23	butanol Flam. Liq. 3, H226; Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335-H336	2.5 - 10%
CAS: 1675-54-3 EINECS: 216-823-5 Index number: 603-073-00-2 Reg.nr.: 01-2119456619-26	bis[4-(2,3-epoxypropoxy)phenyl]propane Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317 Specific concentration limits: Eye Irrit. 2; H319: C ≥ 5 % Skin Irrit. 2; H315: C ≥ 5 %	2.5 - 10%
CAS: 107-98-2 EINECS: 203-539-1 Index number: 603-064-00-3 Reg.nr.: 01-2119457435-35	1-methoxy-2-propanol Flam. Liq. 3, H226; STOT SE 3, H336	1 - 2.5%
CAS: 1314-13-2 EINECS: 215-222-5 Index number: 030-013-00-7 Reg.nr.: 01-2119463881-32	zinc oxide Aquatic Acute 1, H400; Aquatic Chronic 1, H410	1 - 2.5%

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· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· General information: Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· After inhalation: Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
· After swallowing: If symptoms persist consult doctor.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· Suitable extinguishing agents: CO_2 or powder. Fight larger fires with alcohol resistant foam.
· For safety reasons unsuitable extinguishing agents: Water with full jet
· **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
· **5.3 Advice for firefighters**
· Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:** Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections** See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

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· **7.2 Conditions for safe storage, including any incompatibilities**
· Storage:
· Requirements to be met by storerooms and receptacles: Store material in original, tightly closed containers in a cool, well-ventilated area in accordance with applicable (local) regulations. Depending on total volume stored, the storage area should comply with PGS15.
· Information about storage in one common storage facility: Not required.
· Further information about storage conditions: Keep container tightly sealed.
· Recommended storage temperature: 5 - 30 □
· **7.3 Specific end use(s)** No further relevant information available.

* ***SECTION 8: Exposure controls/personal protection***

· **8.1 Control parameters**

· Ingredients with limit values that require monitoring at the workplace:	
1330-20-7 xylene	
IOELV	Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin
107-98-2 1-methoxy-2-propanol	
IOELV	Short-term value: 568 mg/m³, 150 ppm Long-term value: 375 mg/m³, 100 ppm Skin

· DNEL (Derived No Effect Level) for workers		
1330-20-7 xylene		
Dermal	Long term - local effects, worker	180 µg/cm² (Worker)
Inhalative	Acute - systemic effects, worker	289 mg/m³ (Worker)
	Acute - local effects, worker	289 mg/m³ (Worker)
	Long-term - systemic effects, worker	77 mg/m³ (Worker)
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		
Dermal	Acute - systemic effects, worker	8.3 mg/kg bw/day (Worker)
	Long-term - systemic effects, worker	8.3 mg/kg bw/day (Worker)
Inhalative	Acute - local effects, worker	12.3 mg/m³ (Worker)
	Long-term - systemic effects, worker	12.3 mg/m³ (Worker)
78-83-1 butanol		
Inhalative	Long-term - local effects, worker	310 mg/m³ (Worker)
1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane		
Dermal	Long-term - systemic effects, worker	0.75 mg/kg bw/day (Worker)
Inhalative	Long-term - systemic effects, worker	4.93 mg/m³ (Worker)
107-98-2 1-methoxy-2-propanol		
Dermal	Long-term - systemic effects, worker	50.6 mg/kg bw/day (Worker)
Inhalative	Acute - local effects, worker	553.5 mg/m³ (Worker)
	Long-term - local effects, worker	369 mg/m³ (Worker)
1314-13-2 zinc oxide		
Dermal	Long-term - systemic effects, worker	83 mg/kg bw/day (Worker)
Inhalative	Long-term - systemic effects, worker	5 mg/m³ (Worker)

· DNEL (Derived No Effect Level) for the general population		
1330-20-7 xylene		
Oral	Long-term - systemic effects, general population	1.6 mg/kg bw/day (General population)
Dermal	Long-term - systemic effects, general population	108 mg/kg bw/day (General population)
Inhalative	Acute - systemic effects, general population	174 mg/m³ (General population)
	Acute - local effects, general population	174 mg/m³ (General population)

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	Long-term - systemic effects, general population	14.8 mg/m³ (General population)
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		
Oral	Acute - systemic effects, general population	0.75 mg/kg bw/day (General population)
	Long-term - systemic effects, general population	0.75 mg/kg bw/day (General population)
Dermal	Acute - systemic effects, general population	3.6 mg/kg bw/day (General population)
	Long-term - systemic effects, general population	3.6 mg/kg bw/day (General population)
Inhalative	Acute - systemic effects, general population	0.75 mg/m³ (General population)
	Long-term - systemic effects, general population	0.75 mg/m³ (General population)
78-83-1 butanol		
Oral	Long-term - systemic effects, general population	25 mg/kg bw/day (General population)
Inhalative	Long-term - local effects, general population	55 mg/m³ (General population)
1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane		
Oral	Long-term - systemic effects, general population	0.5 mg/kg bw/day (General population)
Dermal	Long-term - systemic effects, general population	0.0893 mg/kg bw/day (General population)
Inhalative	Long-term - systemic effects, general population	0.87 mg/m³ (General population)
107-98-2 1-methoxy-2-propanol		
Oral	Long-term - systemic effects, general population	3.3 mg/kg bw/day (General population)
Dermal	Acute - systemic effects, general population	18.1 mg/kg bw/day (General population)
Inhalative	Long-term - systemic effects, general population	43.9 mg/m³ (General population)
1314-13-2 zinc oxide		
Oral	Long-term - systemic effects, general population	2.5 mg/kg bw/day (General population)
		0.83 mg/kg bw/day (General population)
Dermal	Long-term - systemic effects, general population	83 mg/kg bw/day (General population)

· PNEC (Predicted No Effect Concentration) values

1330-20-7 xylene	
Aquatic compartment - freshwater	0.327 mg/l
Aquatic compartment - marine water	0.327 mg/l
Aquatic compartment - water, intermittent releases	0.327 mg/l
Aquatic compartment - sediment in freshwater	12.46 mg/kg sed dw
Aquatic compartment - sediment in marine water	12.46 mg/kg sed dw
Terrestrial compartment - soil	2.31 mg/kg dw
Sewage treatment plant	6.58 mg/l
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)	
Aquatic compartment - freshwater	0.003 mg/l (Freshwater)
Aquatic compartment - marine water	0.0003 mg/l (Marine water)
Aquatic compartment - water, intermittent releases	0.013 mg/l (Intermittent release water)
Aquatic compartment - sediment in freshwater	0.5 mg/kg sed dw (Sediment freshwater)
Aquatic compartment - sediment in marine water	0.5 mg/kg sed dw (Sediment marine water)
Terrestrial compartment - soil	0.05 mg/kg dw (Soil)
Sewage treatment plant	10 mg/l (stp)
78-83-1 butanol	
Aquatic compartment - freshwater	0.4 mg/l (Freshwater)
Aquatic compartment - marine water	0.04 mg/l (Marine water)
Aquatic compartment - water, intermittent releases	11 mg/l (Intermittent release water)
Aquatic compartment - sediment in freshwater	1.52 mg/kg sed dw (Sediment freshwater)
Aquatic compartment - sediment in marine water	0.152 mg/kg sed dw (Sediment marine water)
Terrestrial compartment - soil	0.0699 mg/kg dw (Soil)
Sewage treatment plant	10 mg/l (stp)
1675-54-3 bis[4-(2,3-epoxypropoxy)phenyl]propane	
Aquatic compartment - freshwater	0.006 mg/l (Freshwater)
Aquatic compartment - marine water	0.001 mg/l (Marine water)
Aquatic compartment - sediment in freshwater	0.341 mg/kg sed dw (Sediment freshwater)

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Aquatic compartment - sediment in marine water	0.034 mg/kg sed dw (Sediment marine water)
Terrestrial compartment - soil	0.065 mg/kg dw (Soil)
Sewage treatment plant	10 mg/l (stp)
Oral secondary poisoning	11 mg/kg food (Food sec poisoning)
107-98-2 1-methoxy-2-propanol	
Aquatic compartment - freshwater	10 mg/l (Freshwater)
Aquatic compartment - marine water	1 mg/l (Marine water)
Aquatic compartment - water, intermittent releases	100 mg/l (Intermittent release water)
Aquatic compartment - sediment in freshwater	52.3 mg/kg sed dw (Sediment freshwater)
Aquatic compartment - sediment in marine water	5.2 mg/kg sed dw (Sediment marine water)
Terrestrial compartment - soil	4.59 mg/kg dw (Soil)
Sewage treatment plant	100 mg/l (stp)
1314-13-2 zinc oxide	
Aquatic compartment - freshwater	0.0206 mg/l (Freshwater)
Aquatic compartment - marine water	0.0061 mg/l (Marine water)
Aquatic compartment - sediment in freshwater	117.8 mg/kg sed dw (Sediment freshwater)
Aquatic compartment - sediment in marine water	56.5 mg/kg sed dw (Sediment marine water)
Terrestrial compartment - soil	35.6 mg/kg dw (Soil)
Sewage treatment plant	0.1 mg/l (stp)

· Additional information: The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· Appropriate engineering controls: No further data; see section 7.
· Individual protection measures, such as personal protective equipment
· General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
· Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· Hand protection
Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
· Material of gloves
Nitrile rubber, NBR
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
Recommended thickness of the material: ≥ 0.3 mm
· Penetration time of glove material
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 16523-1:2015: Level 6).
· For the permanent contact gloves made of the following materials are suitable:
Nitrile rubber, NBR
· As protection from splashes gloves made of the following materials are suitable:
Nitrile rubber, NBR
· Not suitable are gloves made of the following materials:
Leather gloves
Strong material gloves

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· Eye/face protection Tightly sealed goggles

* ***SECTION 9: Physical and chemical properties***

· **9.1 Information on basic physical and chemical properties**	
· General Information	
· Physical state	Fluid
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	116 – 118 °C
· Flammability	Flammable.
· Lower and upper explosion limit	
· Lower:	1.1 Vol %
· Upper:	7 Vol %
· Flash point:	30 °C (Pensky Martens, ASTM D93)
· Auto-ignition temperature:	340 °C
· Decomposition temperature:	Not determined.
· pH at 20 °C	7
· Viscosity:	
· Kinematic viscosity at 40 °C	1,500 – 2,500 mm²/s
· Dynamic at 20 °C:	3,000 – 5,000 mPas (Brookfield, ASTM D1544)
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	150 hPa
· Density and/or relative density	
· Density at 20 °C:	1.73 g/cm³ (DIN 51757, ASTM D 1298)
· Relative density	Not determined.
· Vapour density	Not determined.

· **9.2 Other information**	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
· Solvent content:	
· Organic solvents:	25.5 %
· VOC:	
· VOC (2004/42/EC):	25.50 %
· Solids content:	76.3 %
· Change in condition	
· Evaporation rate	Not determined.

· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void

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· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· Acute toxicity Based on available data, the classification criteria are not met.
· LD/LC50 values relevant for classification:

· Components	Type	Value	Species
ATE (Acute Toxicity Estimates)			
Dermal	LD50	11,429 mg/kg (Rabbit)	

1330-20-7 xylene		
Oral	LD50	4,300 mg/kg (Rat)
Dermal	LD50	2,000 mg/kg (Rabbit)
25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		
Oral	LD50	11,400 mg/kg (Rat)
Dermal	LD50	> 2,000 mg/kg (Rabbit)
78-83-1 butanol		
Oral	LD50	2,460 mg/kg (Rat)
Dermal	LD50	3,400 mg/kg (Rabbit)
107-98-2 1-methoxy-2-propanol		
Oral	LD50	5,660 mg/kg (Rat)
Dermal	LD50	13,000 mg/kg (Rabbit)
1314-13-2 zinc oxide		
Oral	LD50	> 5,000 mg/kg (Rat)

· Skin corrosion/irritation Causes skin irritation.
· Serious eye damage/irritation Causes serious eye damage.
· Respiratory or skin sensitisation May cause an allergic skin reaction.
· Germ cell mutagenicity Based on available data, the classification criteria are not met.
· Carcinogenicity Based on available data, the classification criteria are not met.
· Reproductive toxicity Based on available data, the classification criteria are not met.
· STOT-single exposure Based on available data, the classification criteria are not met.
· STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.
· Aspiration hazard Based on available data, the classification criteria are not met.
· **11.2 Information on other hazards**

· Endocrine disrupting properties
None of the ingredients is listed.

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SECTION 12: Ecological information

· **12.1 Toxicity**
· Aquatic toxicity: No further relevant information available.

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· Type of test	Effective concentration	Method	Assessment
ATE (Acute Toxicity Estimates)			
Inhalative	LC50/4 h	62.9 mg/l	

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight ≤ 700)		
Oral	EC50	1.1 – 3.6 mg/l (Daphnia magna)
Inhalative	LC50/96 h	1.5 – 7.7 mg/l (Oncorhynchus mykiss)
107-98-2 1-methoxy-2-propanol		
Inhalative	LC50/4 h	25.8 mg/l (Rat)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· PBT: Not applicable.
· vPvB: Not applicable.
· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· Remark: Harmful to fish
· Additional ecological information:
· General notes: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.
Harmful to aquatic organisms

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue	
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP13	Sensitising
HP14	Ecotoxic

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.

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SECTION 14: Transport information

· **14.1 UN number or ID number**
· ADR/RID/ADN, IMDG, IATA UN1263

· **14.2 UN proper shipping name**
· ADR/RID/ADN 1263 PAINT
· IMDG PAINT, MARINE POLLUTANT
· IATA PAINT

· **14.3 Transport hazard class(es)**
· ADR/RID/ADN
· Class 3 (F1) Flammable liquids.
· Label 3

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· IMDG, IATA	
· Class	3 Flammable liquids.
· Label	3
· **14.4 Packing group**	
· ADR/RID/ADN, IMDG, IATA	III
· **14.5 Environmental hazards:**	Product contains environmentally hazardous substances: bis[4-(2,3-epoxypropoxy)phenyl]propane
· Marine pollutant:	Yes Symbol (fish and tree)
· **14.6 Special precautions for user**	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	30
· EMS Number:	F-E,S-E
· Stowage Category	A
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	D/E
· Remarks:	In packsize up to 450 liter exempt from ADR according ADR 2.2.3.1.5.
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Remarks:	In packaging up to 30 litres excempt according to IMDG 2.3.2.5.
· UN "Model Regulation":	UN 1263 PAINT, 3, III

*
SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· Directive 2012/18/EU	
· Named dangerous substances - ANNEX I	None of the ingredients is listed.
· Seveso category	P5c FLAMMABLE LIQUIDS
· Qualifying quantity (tonnes) for the application of lower-tier requirements	5,000 t
· Qualifying quantity (tonnes) for the application of upper-tier requirements	50,000 t
· REGULATION (EC) No 1907/2006 ANNEX XVII	Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

(Contd. on page 11)

(Contd. of page 10)

· Regulation (EC) No 273/2004 on drug precursors
None of the ingredients is listed.

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.

· National regulations:

· Technical instructions (air):

Class	Share in %
NK	25.5

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.
EUH205 Contains epoxy constituents. May produce an allergic reaction.

· Classification according to Regulation (EC) No 1272/2008 The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Flammable liquids	On basis of test data
Skin corrosion/irritation Serious eye damage/irritation Skin sensitisation Specific target organ toxicity (repeated exposure)	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	Expert judgement

· Department issuing SDS: Research and Development
· Contact: Saïda El Asjadi, tel: +31 182 372177, e-mail: safety@de-ijssel-coatings.nl
· Date of previous version: 28.01.2022
· Version number of previous version: 87
· Abbreviations and acronyms:
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4

(Contd. on page 12)

(Contd. of page 11)

Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· Sources: Literature data and/or investigation reports are available through the manufacturer.
· * Data compared to the previous version altered.

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 18.07.2023 Version number 48 (replaces version 47) Revision: 18.07.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· Trade name: IJMOPOX HB COATING HARDENER

· Article number: 351
· UFI: KX33-00PE-300C-HUT6

· **1.2 Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
· Sector of Use SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
SU19 Building and construction work
· Product category PC9a Coatings and paints, thinners, paint removers
· Process category PROC19 Manual activities involving hand contact
PROC7 Industrial spraying
PROC10 Roller application or brushing
PROC11 Non industrial spraying
· Environmental release category ERC5 Use at industrial site leading to inclusion into/onto article
ERC8c Widespread use leading to inclusion into/onto article (indoor)
ERC8f Widespread use leading to inclusion into/onto article (outdoor)
· Article category AC13 Plastic articles
AC11 Wood articles
AC7 Metal articles
· Application of the substance / the mixture See our technical datasheet for application details of this product.
Epoxy curing agent

· **1.3 Details of the supplier of the safety data sheet**
· Manufacturer/Supplier: De IJssel Coatings BV, Centrumbaan 960, NL 2841 MH Moordrecht
Tel: +31 182 372177, E-mail: info@de-ijssel-coatings.nl

· Further information obtainable from: Research and Development.
· **1.4 Emergency telephone number:** De IJssel Coatings BV, Tel. +31 182 372177, E-mail: safety@de-ijssel-coatings.nl
Office hours: working days from 08:00 to 17:00 hrs.

*
SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**
· Classification according to Regulation (EC) No 1272/2008


GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.


GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

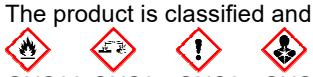

GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.


GHS07

Skin Irrit. 2 H315 Causes skin irritation.
STOT SE 3 H335 May cause respiratory irritation.

· **2.2 Label elements**
· Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.
· Hazard pictograms


GHS02 GHS05 GHS07 GHS08

· Signal word Danger

· Hazard-determining components of labelling: butan-1-ol
xylene
· Hazard statements H226 Flammable liquid and vapour.

(Contd. on page 2)

(Contd. of page 1)

H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H373 May cause damage to organs through prolonged or repeated exposure.

· Precautionary statements

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P362+P364	Take off contaminated clothing and wash it before reuse.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **2.3 Other hazards**
· Results of PBT and vPvB assessment
· PBT: Not applicable.
· vPvB: Not applicable.

*
SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**
· Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:

CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6 Reg.nr.: 01-2119484630-38	butan-1-ol Flam. Liq. 3, H226; Eye Dam. 1, H318; Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	10 – 25%
CAS: 1330-20-7 EINECS: 215-535-7 Index number: 601-022-00-9 Reg.nr.: 01-2119488216-32	xylene Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	10 – 25%
CAS: 90-72-2 EINECS: 202-013-9 Index number: 603-069-00-0 Reg.nr.: 01-2119560597-27	2,4,6-tris(dimethylaminomethyl)phenol Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412	2.5 -10%

· Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· General information: Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
· After inhalation: In case of unconsciousness place patient stably in side position for transportation.
· After skin contact: Immediately wash with water and soap and rinse thoroughly.
· After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
· After swallowing: If symptoms persist consult doctor.
· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· Suitable extinguishing agents: CO2 or powder. Fight larger fires with alcohol resistant foam.

(Contd. on page 3)

(Contd. of page 2)

· For safety reasons unsuitable extinguishing agents: Water with full jet
· **5.2 Special hazards arising from the substance or mixture** During heating or in case of fire poisonous gases are produced.
· **5.3 Advice for firefighters**
· Protective equipment: Mouth respiratory protective device.

* ***SECTION 6: Accidental release measures***

· **6.1 Personal precautions, protective equipment and emergency procedures** Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
· **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
· **6.3 Methods and material for containment and cleaning up:** Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
· **6.4 Reference to other sections** See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
· Information about fire - and explosion protection: Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Keep respiratory protective device available.

· **7.2 Conditions for safe storage, including any incompatibilities**
· Storage:
· Requirements to be met by storerooms and receptacles: Store material in original, tightly closed containers in a cool, well-ventilated area in accordance with applicable (local) regulations. Depending on total volume stored, the storage area should comply with PGS15.
· Information about storage in one common storage facility: Not required.
· Further information about storage conditions: Keep container tightly sealed.
· Recommended storage temperature: 5 - 30 □
· **7.3 Specific end use(s)** No further relevant information available.

* ***SECTION 8: Exposure controls/personal protection***

· **8.1 Control parameters**

· Ingredients with limit values that require monitoring at the workplace:	
1330-20-7 xylene	
IOELV	Short-term value: 442 mg/m³, 100 ppm Long-term value: 221 mg/m³, 50 ppm Skin

· DNEL (Derived No Effect Level) for workers		
71-36-3 butan-1-ol		
Inhalative	Long-term - local effects, worker	310 mg/m³ (Worker)
1330-20-7 xylene		
Dermal	Long term - local effects, worker	180 µg/cm² (Worker)
Inhalative	Acute - systemic effects, worker	289 mg/m³ (Worker)

(Contd. on page 4)

(Contd. of page 3)

	Acute - local effects, worker	289 mg/m³ (Worker)
	Long-term - systemic effects, worker	77 mg/m³ (Worker)
90-72-2 2,4,6-tris(dimethylaminomethyl)phenol		
Dermal	Long-term - systemic effects, worker	0.2 mg/kg bw/day (Worker)
Inhalative	Long-term - systemic effects, worker	0.31 mg/m³ (Worker)

· DNEL (Derived No Effect Level) for the general population

71-36-3 butan-1-ol		
Oral	Long-term - systemic effects, general population	3.125 mg/kg bw/day (General population)
Inhalative	Long-term - local effects, general population	55 mg/m³ (General population)
1330-20-7 xylene		
Oral	Long-term - systemic effects, general population	1.6 mg/kg bw/day (General population)
Dermal	Long-term - systemic effects, general population	108 mg/kg bw/day (General population)
Inhalative	Acute - systemic effects, general population	174 mg/m³ (General population)
	Acute - local effects, general population	174 mg/m³ (General population)
	Long-term - systemic effects, general population	14.8 mg/m³ (General population)

· PNEC (Predicted No Effect Concentration) values

71-36-3 butan-1-ol	
Aquatic compartment - freshwater	0.082 mg/l (Freshwater)
Aquatic compartment - marine water	0.0082 mg/l (Marine water)
Aquatic compartment - water, intermittent releases	2.25 mg/l (Intermittent release water)
Aquatic compartment - sediment in freshwater	0.178 mg/kg sed dw (Sediment freshwater)
Aquatic compartment - sediment in marine water	0.0178 mg/kg sed dw (Sediment marine water)
Terrestrial compartment - soil	0.015 mg/kg dw (Soil)
Sewage treatment plant	2,476 mg/l (stp)
1330-20-7 xylene	
Aquatic compartment - freshwater	0.327 mg/l
Aquatic compartment - marine water	0.327 mg/l
Aquatic compartment - water, intermittent releases	0.327 mg/l
Aquatic compartment - sediment in freshwater	12.46 mg/kg sed dw
Aquatic compartment - sediment in marine water	12.46 mg/kg sed dw
Terrestrial compartment - soil	2.31 mg/kg dw
Sewage treatment plant	6.58 mg/l
90-72-2 2,4,6-tris(dimethylaminomethyl)phenol	
Aquatic compartment - freshwater	0.084 mg/l (Freshwater)
Aquatic compartment - marine water	0.0084 mg/l (Marine water)
Aquatic compartment - water, intermittent releases	0.84 mg/l (Intermittent release water)
Sewage treatment plant	0.2 mg/l (stp)

· Additional information: The lists valid during the making were used as basis.

· **8.2 Exposure controls**
· Appropriate engineering controls No further data; see section 7.
· Individual protection measures, such as personal protective equipment
· General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the skin.
Avoid contact with the eyes and skin.
· Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· Hand protection Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 5)

(Contd. of page 4)

· Material of gloves	Nitrile rubber, NBR The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Recommended thickness of the material: ≥ 0.3 mm
· Penetration time of glove material	The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 16523-1:2015: Level 6).
· For the permanent contact gloves made of the following materials are suitable:	Nitrile rubber, NBR
· As protection from splashes gloves made of the following materials are suitable:	Nitrile rubber, NBR
· Not suitable are gloves made of the following materials:	Leather gloves Strong material gloves
· Eye/face protection	Tightly sealed goggles

* ***SECTION 9: Physical and chemical properties***

· **9.1 Information on basic physical and chemical properties**	
· General Information	
· Physical state	Fluid
· Colour:	According to product specification
· Odour:	Characteristic
· Odour threshold:	Not determined.
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	116 – 118 °C
· Flammability	Flammable.
· Lower and upper explosion limit	
· Lower:	1.1 Vol %
· Upper:	9.4 Vol %
· Flash point:	30 °C (Pensky Martens, ASTM D93)
· Auto-ignition temperature:	340 °C
· Decomposition temperature:	Not determined.
· pH	Not determined.
· Viscosity:	
· Kinematic viscosity at 40 °C	700 – 900 mm²/s
· Dynamic at 20 °C:	700 – 900 mPas (Brookfield, ASTM D1544)
· Solubility	
· water:	Not miscible or difficult to mix.
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure at 20 °C:	6.7 hPa
· Density and/or relative density	
· Density at 20 °C:	0.86 g/cm³ (DIN 51757, ASTM D 1298)
· Relative density	Not determined.
· Vapour density	Not determined.

· **9.2 Other information**	
· Appearance:	
· Form:	Fluid
· Important information on protection of health and environment, and on safety.	
· Ignition temperature:	Product is not selfigniting.
· Explosive properties:	Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.
· Solvent content:	
· Organic solvents:	35.0 %
· VOC:	
· VOC (2004/42/EC):	35.00 %
· Solids content:	60.0 %

(Contd. on page 6)

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· Change in condition	
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.
· **10.2 Chemical stability**
· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
· **10.3 Possibility of hazardous reactions** No dangerous reactions known.
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

*
SECTION 11: Toxicological information

· **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
· Acute toxicity Based on available data, the classification criteria are not met.
· LD/LC50 values relevant for classification:

· Components	Type	Value	Species
ATE (Acute Toxicity Estimates)			
Oral	LD50	2,886 mg/kg	
Dermal	LD50	11,429 mg/kg	(Rabbit)
71-36-3 butan-1-ol			
Oral	LD50	790 mg/kg	(Rat)
Dermal	LD50	3,400 mg/kg	(Rabbit)
1330-20-7 xylene			
Oral	LD50	4,300 mg/kg	(Rat)
Dermal	LD50	2,000 mg/kg	(Rabbit)

· Skin corrosion/irritation Causes skin irritation.
· Serious eye damage/irritation Causes serious eye damage.
· Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
· Germ cell mutagenicity Based on available data, the classification criteria are not met.
· Carcinogenicity Based on available data, the classification criteria are not met.
· Reproductive toxicity Based on available data, the classification criteria are not met.
· STOT-single exposure May cause respiratory irritation.
· STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.
· Aspiration hazard Based on available data, the classification criteria are not met.

(Contd. on page 7)

(Contd. of page 6)

· **11.2 Information on other hazards**

· Endocrine disrupting properties
None of the ingredients is listed.

* ***SECTION 12: Ecological information***

· **12.1 Toxicity**
· Aquatic toxicity: No further relevant information available.

· Type of test	Effective concentration	Method	Assessment
ATE (Acute Toxicity Estimates)			
Inhalative	LC50/4 h	62.9 mg/l	

71-36-3 butan-1-ol		
Inhalative	LC50/4 h	8,000 mg/l (Rat)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **12.5 Results of PBT and vPvB assessment**
· PBT: Not applicable.
· vPvB: Not applicable.
· **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
· **12.7 Other adverse effects**
· Additional ecological information:
· General notes: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even small quantities leak into the ground.

* ***SECTION 13: Disposal considerations***

· **13.1 Waste treatment methods**
· Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue	
08 00 00	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS
08 01 00	wastes from MFSU and removal of paint and varnish
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
HP3	Flammable
HP4	Irritant - skin irritation and eye damage
HP5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity

· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN number or ID number**
· ADR/RID/ADN, IMDG, IATA UN1263

· **14.2 UN proper shipping name**
· ADR/RID/ADN 1263 PAINT
· IMDG, IATA PAINT

· **14.3 Transport hazard class(es)**
· ADR/RID/ADN
· Class 3 (F1) Flammable liquids.
· Label 3

(Contd. on page 8)

(Contd. of page 7)

· IMDG, IATA	
· Class	3 Flammable liquids.
· Label	3
· **14.4 Packing group**	
· ADR/RID/ADN, IMDG, IATA	III
· **14.5 Environmental hazards:**	
· Marine pollutant:	No
· **14.6 Special precautions for user**	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	30
· EMS Number:	F-E,S-E
· Stowage Category	A
· **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
· Transport/Additional information:	
· ADR/RID/ADN	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	D/E
· Remarks:	In packsize up to 450 liter exempt from ADR according ADR 2.2.3.1.5.
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Remarks:	In packaging up to 30 litres excempt according to IMDG 2.3.2.5.
· UN "Model Regulation":	UN 1263 PAINT, 3, III

* ***SECTION 15: Regulatory information***

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· Directive 2012/18/EU	
· Named dangerous substances - ANNEX I	None of the ingredients is listed.
· Seveso category	P5c FLAMMABLE LIQUIDS
· Qualifying quantity (tonnes) for the application of lower-tier requirements	5,000 t
· Qualifying quantity (tonnes) for the application of upper-tier requirements	50,000 t
· REGULATION (EC) No 1907/2006 ANNEX XVII	Conditions of restriction: 3

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

· REGULATION (EU) 2019/1148

· Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

· Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

· Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

(Contd. on page 9)

(Contd. of page 8)

· Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors
None of the ingredients is listed.

· National regulations:

· Technical instructions (air):

Class	Share in %
NK	35.0

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

· Classification according to Regulation (EC) No 1272/2008 The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Flammable liquids	On basis of test data
Skin corrosion/irritation Serious eye damage/irritation Specific target organ toxicity (repeated exposure)	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
Specific target organ toxicity (single exposure)	Expert judgement

· Department issuing SDS: Research and Development
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· Date of previous version: 23.03.2021
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· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· Sources: Literature data and/or investigation reports are available through the manufacturer.
· * Data compared to the previous version altered.