

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

1.1. Product identifier

Mixture identification:

Trade name: ULTRATOP WR 2C /B

Trade code: 904TN99999

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

Recommended use: Solvent-borne protective paint

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: ULTRA POLYMERS

43 Bakers Lane, Southport PR9 9RN. Reg. 10602206

Responsible: info@ultra-polymers.com

1.4. Emergency telephone number

Phone: +44 (0) 3304 004170. Fax: +44 (0) 3304 004458

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Flam. Liq. 3	Flammable liquid and vapour.
Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Skin Sens. 1	May cause an allergic skin reaction.
STOT SE 3	May cause respiratory irritation.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) n. 1272/2008 (CLP)

Pictograms and Signal Words



Warning

Hazard statements:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261	Avoid breathing vapours.
P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire, use a foam fire extinguisher to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.

Special Provisions:

EUH208 Contains . May produce an allergic reaction.

Contains:

HDI oligomers, iminooxadiazindione

o-xylene

Special provisions according to Annex XVII of REACH and subsequent amendments:

None.

2.3. Other hazards

No PBT/vPvB Ingredients are present

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients**3.1. Substances**

N.A.

3.2. Mixtures

Mixture identification: ULTRATOP WR 2C /B

Hazardous components within the meaning of the CLP regulation and related classification:

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥75 - <100 %	HDI oligomers, iminooxadiazindione	CAS:28182-81-2 EC:931-297-3	Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335	01-2119488934-20-XXXX
≥10 - <20 %	o-xylene	CAS:1330-20-7 EC:215-535-7 Index:601-022-00-9	Flam. Liq. 3, H226; Asp. Tox. 1, H304; STOT RE 2, H373; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	01-2119488216-32-XXXX
≥10 - <20 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226	01-2119475791-29-xxxx
≥0.25 - <0.49 %		CAS:822-06-0 EC:212-485-8 Index:615-011-00-1	Acute Tox. 2, H330; Acute Tox. 4, H302; Eye Irrit. 2, H319; STOT SE 3, H335; Skin Irrit. 2, H315; Resp. Sens. 1, H334; Skin Sens. 1, H317	01-2119457571-37-xxxx

SECTION 4: First aid measures**4.1. Description of first aid measures**

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most important symptoms and effects, both acute and delayed

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

In case of fire, use a foam fire extinguisher to extinguish.

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

Store at below 20 °C. Keep away from unguarded flame and heat sources. Avoid direct exposure to sunlight.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

Component	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
o-xylene	National	SWEDEN		221	50	442	100		SWEDEN, Short term value,

							15 minutes average value
National FINLAND		220	50	440	100	FINLAND, hud	
National NORWAY		108	25	NORWAY, H			
EU	None	221	50	442	100	Skin	
National NORWAY		109	25	218	50		
ACGIH	None	100		150		A4, BEI - URT and eye irr, CNS impair	
DFG	GERMANY	C	880		200		
ACGIH			100	150		A4 - Not Classifiable as a Human Carcinogen;CNS impairment;eye and upper respiratory tract irritation	
National SWEDEN		221	50				
National FRANCE		221	50	442	100		
National SPAIN		221	50	442	100		
National GREECE		435	100	650	150		
National DENMARK		109	25				
National FINLAND		220	50	440	100		
National GERMANY		440	100				
National PORTUGAL		221	50	442	100		
National NORWAY		108	25	135	37.5		
National BELGIUM		221	50	442	100		
NDS	POLAND	100					
NDSch	POLAND				200		
CHE	SWITZERLAND				870	200	
NDS	NETHERLANDS	210			442		
National CZECH REPUBLIC		200					
National HUNGARY		221			442		
Malaysi a OEL	MALAYSIA	434	100				
National ESTONIA		200	50	450	100		
National LATVIA		221	50	442	100		
National CZECH REPUBLIC		C				400	
National SLOVAKIA		C				442	
National SLOVAKIA		221	50				
National SLOVENIA		221	50	442	100		
National UNITED KINGDOM		220	50	441	100		
National BULGARIA		221.0	50	442	100		
National ROMANIA		221	50	442	100		
TUR	TURKEY	221	50	442	100		
National LITHUANIA		221	50	442	100		
National CROATIA		221	50	442	100		
EU		221	50	442	100	Indicative	Possibility of significant uptake through the skin (pure)
DFG		GERMANY	C	440		100	
2-methoxy-1-methylethyl acetate	ACGIH	None	275.000	50.000	550.000	100.000	Skin
SUVA		None	275	50			
National SWEDEN		250.000	50	400.000	75.000	SWEDEN, Short-term value, 15 minutes average value	

National	FINLAND		270.000	50	550.000	100.000		FINLAND, hud
National	NORWAY		270	50				H: Can be absorbed through the skin. E: EU has an indicative limit value for the substance).
NDS	None		260.000					
NDSch	None		520.000					
EU	None		275.000	50.000	550.000	100.000		Skin
DFG	GERMANY	C			270.000	50.000		
National	SWEDEN		275.000	50.000				
National	FRANCE		275.000	50	550.000	100		
National	SPAIN		275	50	550.000	100.000		
National	GREECE		275	50	550	100		
National	DENMARK		275	50				
National	FINLAND		270.000	50	550	100		
National	GERMANY		270.000	50				
National	PORTUGAL		275.000	50	550.000	100.000		
National	BELGIUM		275	50	550	100		
NDS	POLAND		260.000					
NDSch	POLAND				520.000			
CHE	SWITZERLAND				275.000	50.000		
NDS	NETHERLANDS		550.000					
National	CZECH REPUBLIC		270.000					
National	HUNGARY		275		550			
National	ESTONIA		275.000	50.000	550.000	100.000		
National	LATVIA		275.000	50.000	550.000	100.000		
National	CZECH REPUBLIC	C			550			
National	SLOVAKIA	C			550			
National	SLOVAKIA		275	50				
National	SLOVENIA		275.000	50.000	550	100.000		
National	UNITED KINGDOM		274.000	50.000	548.000	100.000		
National	BULGARIA		275	50	550	100		
National	ROMANIA		275.000	50	550.000	100		
TUR	TURKEY		275.000	50.000	550.000	100.000		
National	LITHUANIA		250.000	50	400.000	75.000		
National	CROATIA		275	50	550	100		
EU			275	50	550	100	Indicative	Possibility of significant uptake through the skin
ACGIH	None			0.005				URT irr, resp sens
National	SWEDEN	C	0.02	0.002	0.03	0.005		SWEDEN, Ceiling limit value
National	NORWAY		0.035	0.005				NORWAY, A 4
National	NORWAY		0.035	0.005	0.07	0.01		
DFG	GERMANY	C			0.035	0.005		
ACGIH				0.005				respiratory sensitization;upper respiratory tract irritation
National	SWEDEN		0.02	0.002				
National	FRANCE		0.075	0.01	0.15	0.02		
National	SPAIN		0.035	0.005				
National	GREECE		0.075	0.01	0.15	0.02		
National	DENMARK		0.035	0.005				
National	GERMANY		0.035	0.005				

National PORTUGAL		0.005		
National NORWAY		0.035	0.005	0.01
National BELGIUM		0.034	0.005	
NDS POLAND		0.04		
NDSch POLAND			0.08	
National CZECH REPUBLIC		0.035		
National HUNGARY		0.035		0.035
Malaysi a OEL	MALAYSIA	0.034	0.005	
National ESTONIA		0.03	0.005	0.07 0.01
National LATVIA		0.05		
National CZECH REPUBLIC	C			0.07
National SLOVAKIA		0.035	0.005	
National SLOVENIA		0.035	0.005	0.035 0.005
National BULGARIA		0.1		
National ROMANIA		0.05	0.007	1 0.14
National LITHUANIA		0.03	0.005	
National LITHUANIA	C			0.07 0.01

Biological Exposure Index

CAS-No.	Component	Value	UoM	Medium	Biological Indicator	Sampling Period
1330-20-7	o-xylene	1,5	GGCREAT	Urine	Methyl uric Acid	End of turn
822-06-0		15	MICROGGCREAT	Urine	1,6-Hexamethylenediamine with hydrolysis	End of turn

Predicted No Effect Concentration (PNEC) values

Component	CAS-No.	PNEC Limit	Exposure Route	Exposure Frequency	Remark
HDI oligomers, iminooxadiazindione	28182-81-2	0.199 mg/l	Fresh Water		
		44551 mg/kg	Freshwater sediments		
		0.0199 mg/l	Marine water		
		4455 mg/kg	Marine water sediments		
		100 mg/l	Microorganisms in sewage treatments		
		8884 mg/kg	Soil		
o-xylene	1330-20-7	0.327 mg/l	Fresh Water		
		0.327 mg/l	Marine water		
		12.46 mg/kg	Freshwater sediments		
		12.46 mg/kg	Marine water sediments		
		2.31 mg/kg	Soil		
		6.58 mg/l	Microorganisms in sewage treatments		
		0.32 mg/l	Intermittent release		
2-methoxy-1-methylethyl acetate	108-65-6	0.635 mg/l	Fresh Water		
		0.0635	Marine water		

	mg/l	
	3.29 mg/kg	Freshwater sediments
	0.329 mg/kg	Marine water sediments
	6.35 mg/l	Intermittent release
	100 mg/l	Microorganisms in sewage treatments
	0.29 mg/kg	Soil
822-06-0	0.077 mg/l	Fresh Water
	0.008 mg/l	Marine water
	8.42 mg/l	Microorganisms in sewage treatments
	0.013 mg/kg	Freshwater sediments
	0.001 mg/kg	Marine water
	0.003	Soil

Derived No Effect Level. (DNEL)

Component	CAS-No.	Worker Industrial	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
HDI oligomers, iminooxadiazindione	28182-81-2	0.5 mg/m3			Human Inhalation	Long Term, local effects	
		1 mg/m3			Human Inhalation	Short Term, local effects	
o-xylene	1330-20-7	289 mg/m3		174 mg/m3	Human Inhalation	Short Term, local effects	
		289 mg/m3		174 mg/m3	Human Inhalation	Short Term, systemic effects	
		180 mg/kg		108 mg/kg	Human Dermal	Long Term, systemic effects	
		77 mg/m3		14.8 mg/m3	Human Inhalation	Long Term, systemic effects	
				1.6 mg/kg	Human Oral	Long Term, systemic effects	
2-methoxy-1-methylethyl acetate	108-65-6	796 mg/kg		320 mg/kg	Human Dermal	Long Term, systemic effects	
		275 mg/m3		33 mg/m3	Human Inhalation	Long Term, systemic effects	
				36 mg/kg	Human Oral	Long Term, systemic effects	
		550 mg/m3			Human Inhalation	Short Term, local effects	
	822-06-0	0.035 mg/m3			Human Inhalation	Long Term, systemic effects	
		0.07 mg/m3			Human Inhalation	Short Term, systemic effects	
		0.035 mg/m3			Human Inhalation	Long Term, local effects	
		0.07 mg/m3			Human Inhalation	Short Term, local effects	

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Use respiratory protection where ventilation is insufficient or exposure is prolonged.

Hygienic and Technical measures

N.A.

Appropriate engineering controls:

N.A.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance and colour: liquid light yellow

Odour: Characteristic

Odour threshold: N.A.

pH: N.A.

Melting point / freezing point: N.A.

Initial boiling point and boiling range: 145 °C (293 °F)

Flash point: 38 °C (100 °F)

Evaporation rate: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Vapour pressure: N.A.

Relative density: 1.07 g/cm³

Solubility in water: N.A.

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: 250.00 cPs

Explosive properties: N.A.

Oxidizing properties: N.A.

Solid/gas flammability: N.A.

9.2. Other information

No additional information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

Avoid contact with combustible materials. The product could catch fire.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

HDI oligomers, iminooxadiazindione	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg	
		LD50 Skin Rat > 2000 mg/kg	
		LD50 Skin Rabbit > 2000 mg/kg	
		LC50 Inhalation Mist Rat = 1.5 mg/l 4h	
		LC50 Skin Rat = mg/l	
		LC50 Inhalation Rat = 18500 mg/m3 1h	
	b) skin corrosion/irritation	Respiratory Tract Irritant Inhalation Mist Rabbit Positive mg/kg	90 d
		Respiratory Tract Irritant Rabbit Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Skin Mouse Positive 4h	
		Skin Sensitization Inhalation Mouse Positive mg/m3	
o-xylene	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg	
		LC50 Inhalation Vapour Rat = 11 mg/l 4h	
		LD50 Skin Rabbit = 3200 mg/kg	
		LD50 Skin Rabbit > 4350 mg/kg	
		LC50 Inhalation Rat = 29.08 mg/l 4h	
		LD50 Oral Rat = 3500 mg/kg	
	e) germ cell mutagenicity	NOAEL Inhalation Rat > 2000 ppm	
	f) carcinogenicity	NOAEL Oral Rat = 500 mg/kg	
		NOAEL Oral Rat = 1000 mg/kg	
	g) reproductive toxicity	NOAEL Inhalation Rat = 500 ppm	
2-methoxy-1-methylethyl acetate	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg	
		LD50 Skin Rabbit > 5000 mg/kg	
		LC50 Inhalation Dust Rat > 23.8 mg/l	
		LD50 Skin Rabbit > 5 g/kg	
		LD50 Oral Rat = 8532 mg/kg	
	e) germ cell mutagenicity	NOAEL Inhalation Rat = 1000 ppm	
	g) reproductive toxicity	NOAEL Inhalation Rat = 500 ppm	
	a) acute toxicity	LD50 Oral Rat = 746 mg/kg	
		LC50 Inhalation Vapour Rat = 0.124 mg/l 4h	
		LD50 Skin Rat > 7000 mg/kg	
		LD50 Skin Rabbit = 593 mg/kg	
		LC50 Inhalation Rat = 0.06 mg/l 4h	
		LD50 Oral Rat = 738 mg/kg	
		LD50 Oral Rat = 738 mg/kg	

If not differently specified, the information required in Regulation (EU)2015/830 listed below must be considered as N.A.

- a) acute toxicity
- b) skin corrosion/irritation
- c) serious eye damage/irritation
- d) respiratory or skin sensitisation

e) germ cell mutagenicity
f) carcinogenicity
g) reproductive toxicity
h) STOT-single exposure
Toxicological kinetics, metabolism and distribution information
i) STOT-repeated exposure
j) aspiration hazard

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
HDI oligomers, iminooxadiazindione	CAS: 28182-81-2 - EINECS: 931-297-3	a) Aquatic acute toxicity : LC50 Fish > 100 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48
		a) Aquatic acute toxicity : EC50 Algae = 199 mg/L 72
		c) Bacteria toxicity : EC50 Bacteria > 10000 mg/L 3
o-xylene	CAS: 1330-20-7 - EINECS: 215-535-7 - INDEX: 601-022-00-9	a) Aquatic acute toxicity : EC50 Daphnia = 165 mg/L 48
		a) Aquatic acute toxicity : LC50 Fish > 2 mg/L 96
		a) Aquatic acute toxicity : EC50 Algae = 2.2 mg/L 72
		c) Bacteria toxicity : EC50 = 96 mg/L 24
		b) Aquatic chronic toxicity : NOEC Fish > 1.3 mg/L
		b) Aquatic chronic toxicity : NOEC Daphnia = 1.57 mg/L
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 13.4 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 2.661 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Oncorhynchus mykiss 13.5 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 13.1 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus = 19 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Lepomis macrochirus 7.711 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Pimephales promelas 23.53 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 780 mg/L 96h EPA
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio > 780 mg/L 96h IUCLID
		a) Aquatic acute toxicity : LC50 Fish Poecilia reticulata 30.26 mg/L 96h EPA
		a) Aquatic acute toxicity : EC50 Daphnia water flea = 3.82 mg/L 48h
		a) Aquatic acute toxicity : LC50 Daphnia Gammarus lacustris = 0.6 mg/L 48h
2-methoxy-1-methylethyl acetate	CAS: 108-65-6 - EINECS: 203-603-9 - INDEX: 607-195-00-7	a) Aquatic acute toxicity : LC50 Fish = mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 500 mg/L 48
		b) Aquatic chronic toxicity : NOEC Fish = 47.5 mg/L - 14 d
		b) Aquatic chronic toxicity : NOEC Daphnia = 100 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1000 mg/L 72
		a) Aquatic acute toxicity : NOEC Algae = 1000 mg/L 96

a) Aquatic acute toxicity : LC50 Fish Pimephales promelas = 161 mg/L 96h IUCLID

a) Aquatic acute toxicity : EC50 Daphnia Daphnia magna > 500 mg/L 48h IUCLID

CAS: 822-06-0 -
EINECS: 212-485-8
- INDEX: 615-011-
00-1

a) Aquatic acute toxicity : EC50 Algae = 77.4 mg/L 72

a) Aquatic acute toxicity : LC50 Fish = 8.8 mg/L 96

a) Aquatic acute toxicity : LC50 Fish Brachydanio rerio = 26.1 mg/L 96h IUCLID

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB Ingredients are present

12.6. Other adverse effects

N.A.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

14.1. UN number

1139

14.2. UN proper shipping name

ADR-Shipping Name: COATING SOLUTION

IATA-Technical name: COATING SOLUTION

IMDG-Technical name: COATING SOLUTION

14.3. Transport hazard class(es)

ADR-Class: 3

IATA-Class: 3

IMDG-Class: 3

14.4. Packing group

ADR-Packing Group: III

IATA-Packing group: III

IMDG-Packing group: III

14.5. Environmental hazards

Marine pollutant: No

Environmental Pollutant: No

14.6. Special precautions for user

Road and Rail (ADR-RID) :

ADR-Label: 3

ADR-Hazard identification number: 30

ADR-Special Provisions: -

ADR-Transport category (Tunnel restriction code): 3 (D/E)

Air (IATA) :

IATA-Passenger Aircraft: 355

IATA-Cargo Aircraft: 366

IATA-Label: 3

IATA-Subsidiary hazards: -

IATA-Erg: 3L

IATA-Special Provisioning: A3

Sea (IMDG) :

IMDG-Stowage Code: Category A

IMDG-Stowage Note: -

IMDG-Subsidiary hazards: -

IMDG-Special Provisioning: 955

IMDG-Page: N/A

IMDG-Label: N/A

IMDG-EMS: F-E, S-E

IMDG-MFAG: N/A

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

N.A.

SECTION 15: Regulatory information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) 2015/830

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

Seveso III category according to Annex 1, part 1	Lower-tier threshold (tonnes)	Upper-tier threshold (tonnes)
Products belongs to category P5c	5000	50000

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3, 40

Restrictions related to the substances contained: None.

SVHC Substances:

No data available

German Water Hazard Class (WGK)

N.A.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
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.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/2/Inhal	Acute Tox. 2	Acute toxicity (inhalation), Category 2
3.1/4/Dermal	Acute Tox. 4	Acute toxicity (dermal), Category 4
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.1/1	Resp. Sens. 1	Respiratory Sensitisation, Category 1
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2

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

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
2.6/3	On basis of test data
3.2/2	Calculation method
3.3/2	Calculation method
3.4.2/1	Calculation method
3.8/3	Calculation method
3.9/2	Calculation method

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This SDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
 AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 ATE: Acute Toxicity Estimate
 ATEmix: Acute toxicity Estimate (Mixtures)
 BCF: Biological Concentration Factor
 BEI: Biological Exposure Index
 BOD: Biochemical Oxygen Demand
 CAS: Chemical Abstracts Service (division of the American Chemical Society).
 CAV: Poison Center
 CE: European Community
 CLP: Classification, Labeling, Packaging.
 CMR: Carcinogenic, Mutagenic and Reprotoxic
 COD: Chemical Oxygen Demand
 COV: Volatile Organic Compound
 CSA: Chemical Safety Assessment
 CSR: Chemical Safety Report
 DMEL: Derived Minimal Effect Level
 DNEL: Derived No Effect Level.
 DPD: Dangerous Preparations Directive
 DSD: Dangerous Substances Directive
 EC50: Half Maximal Effective Concentration
 ECHA: European Chemicals Agency
 EINECS: European Inventory of Existing Commercial Chemical Substances.
 ES: Exposure Scenario
 GefStoffVO: Ordinance on Hazardous Substances, Germany.
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
 IARC: International Agency for Research on Cancer
 IATA: International Air Transport Association.
 IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
 IC50: half maximal inhibitory concentration
 ICAO: International Civil Aviation Organization.
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
 IMDG: International Maritime Code for Dangerous Goods.
 INCI: International Nomenclature of Cosmetic Ingredients.
 IRCCS: Scientific Institute for Research, Hospitalization and Health Care
 KSt: Explosion coefficient.
 LC50: Lethal concentration, for 50 percent of test population.
 LD50: Lethal dose, for 50 percent of test population.
 LDLo: Leathal Dose Low
 N.A.: Not Applicable
 N/A: Not Applicable
 N/D: Not defined/ Not available
 NA: Not available
 NIOSH: National Institute for Occupational Safety and Health
 NOAEL: No Observed Adverse Effect Level
 OSHA: Occupational Safety and Health Administration.
 PBT: Persistent, Bioaccumulative and Toxic
 PGK: Packaging Instruction
 PNEC: Predicted No Effect Concentration.
 PSG: Passengers
 RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
 STEL: Short Term Exposure limit.
 STOT: Specific Target Organ Toxicity.
 TLV: Threshold Limiting Value.
 TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
 vPvB: Very Persistent, Very Bioaccumulative.
 WGK: German Water Hazard Class.

Paragraphs modified from the previous revision:

- 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
- 2. HAZARDS IDENTIFICATION
- 7. HANDLING AND STORAGE

- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES
- 11. TOXICOLOGICAL INFORMATION
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL CONSIDERATIONS
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION