

Safety Data Sheet

according to UK REACH Regulation

Revision date: 05/07/2024

ORAFOL® Ceramic Coating

Product code: 2000087

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

1.1. Product identifier

ORAFOL® Ceramic Coating

Further trade names

Starter-Set Keramikversiegelung

UFI: UD7P-XRV0-M50V-4985

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

Use of the substance/mixture

Plating agent

Uses advised against

Do not use for private purposes (household). Reserved for industrial and professional use.

1.3. Details of the supplier of the safety data sheet

Company name:	ORAFOL Europe GmbH	
	Germany	
Street:	Orafolstraße 1	
Place:	D-16515 Oranienburg	
Telephone:	+ 49 3301 864 0	Telefax: + 49 3301 864 100
E-mail:	EHSQ@orafol.de	
Contact person:	EHSQ Department	
Internet:	www.orafol.com	

1.4. Emergency telephone number:

National Poison Information Service: In case of a medical emergency following exposure to a chemical, the public should call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24 (UK only).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Flam. Liq. 3; H226
Acute Tox. 4; H302
Asp. Tox. 1; H304
Skin Corr. 1B; H314
Eye Dam. 1; H318
Skin Sens. 1; H317
STOT SE 3; H336
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with n-butyl acetate
Distillates (petroleum), hydro-treated light; Kerosine - unspecified
3-aminopropyltriethoxysilane

Signal word: Danger

Pictograms:



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Hazard statements

- H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

- 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.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H304-H314-H317-H412

Precautionary statements

P260-P280-P303+P361+P353-P305+P351+P338

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
112-07-2	2-butoxyethyl acetate; butylglycol acetate			40 - < 55 %
	203-933-3	607-038-00-2		
	Acute Tox. 4, Acute Tox. 4, Acute Tox. 4; H332 H312 H302			
475645-84-2	Cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with			25 - < 50 %
	640-361-7			
	Flam. Liq. 2, Acute Tox. 4, Skin Corr. 1B, STOT SE 3, Aquatic Chronic 3; H225 H302 H314 H336 H412			
123-86-4	n-butyl acetate			15 - < 25 %
	204-658-1	607-025-00-1		
	Flam. Liq. 3, STOT SE 3; H226 H336 EUH066			

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

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CAS No	Chemical name	Quantity
	EC No	Index No
	Classification (GB CLP Regulation)	REACH No
64742-47-8	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	15 - < 25 %
	926-141-6	
	Flam. Liq. 3, Asp. Tox. 1; H226 H304	
71750-79-3	Siloxanes and Silicones, 3-[(2-aminoethyl)amino]propyl Me,di-Me	1 - < 5 %
	Skin Irrit. 2, Eye Dam. 1; H315 H318	
919-30-2	3-aminopropyltriethoxysilane	1 - < 5 %
	213-048-4	612-108-00-0
	Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A; H302 H314 H318 H317	
108-88-3	toluene	0,1 - < 1 %
	203-625-9	601-021-00-3
	01-2119471310-51	
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H225 H361d H315 H336 H373 H304 H412	

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
112-07-2	203-933-3	2-butoxyethyl acetate; butylglycol acetate	40 - < 55 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 2,66 mg/l (dusts or mists); dermal: LD50 = ca. 1500 mg/kg; oral: LD50 = ca. 1880 mg/kg	
475645-84-2	640-361-7	Cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with	25 - < 50 %
		oral: ATE = 500 mg/kg	
123-86-4	204-658-1	n-butyl acetate	15 - < 25 %
		inhalation: LC50 = > 6,6 mg/l (vapours); oral: LD50 = 14130 mg/kg	
919-30-2	213-048-4	3-aminopropyltriethoxysilane	1 - < 5 %
		oral: ATE = 500 mg/kg	
108-88-3	203-625-9	toluene	0,1 - < 1 %
		inhalation: LC50 = 49 mg/l (vapours); dermal: LD50 = 12200 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!
Remove affected person from the danger area and lay down.
Remove contaminated, saturated clothing immediately.

After inhalation

Remove casualty to fresh air and keep warm and at rest.
Call a physician immediately.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink 1 glass of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Flammable Pyrolysis products, toxic

The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.

In case of fire may be liberated:

Nitrogen oxides (NO_x)

Carbon monoxide

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Explosion risk.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Advice on general occupational hygiene

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Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints on joint storage

Do not store together with: Oxidizing agent. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

Plating agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
112-07-2	2-Butoxyethyl acetate	20	133		TWA (8 h)	WEL
		50	332		STEL (15 min)	WEL
123-86-4	Butyl acetate	150	724		TWA (8 h)	WEL
		200	966		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
112-07-2	2-butoxyethyl acetate; butylglycol acetate			
Worker DNEL, acute		inhalation	local	333 mg/m³
Worker DNEL, acute		dermal	systemic	120 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	775 mg/m³
Consumer DNEL, acute		dermal	systemic	72 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	499 mg/m³
Consumer DNEL, acute		oral	systemic	36 mg/kg bw/day
Consumer DNEL, acute		inhalation	local	200 mg/m³
Consumer DNEL, long-term		dermal	systemic	102 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	80 mg/m³
Consumer DNEL, long-term		oral	systemic	8,6 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	169 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	133 mg/m³
123-86-4	n-butyl acetate			
Worker DNEL, long-term		inhalation	systemic	300 mg/m³
Worker DNEL, acute		inhalation	systemic	600 mg/m³
Worker DNEL, long-term		inhalation	local	300 mg/m³
Worker DNEL, acute		inhalation	local	600 mg/m³
Worker DNEL, long-term		dermal	systemic	11 mg/kg bw/day
Worker DNEL, acute		dermal	systemic	11 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	35,7 mg/m³
Consumer DNEL, acute		inhalation	systemic	300 mg/m³
Consumer DNEL, long-term		inhalation	local	35,7 mg/m³
Consumer DNEL, acute		inhalation	local	300 mg/m³
Consumer DNEL, long-term		dermal	systemic	6 mg/kg bw/day

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
DNEL type				
Consumer DNEL, acute		dermal	systemic	6 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	2 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	2 mg/kg bw/day
108-88-3	toluene			
Worker DNEL, long-term		inhalation	systemic	192 mg/m³
Worker DNEL, acute		inhalation	systemic	384 mg/m³
Worker DNEL, long-term		inhalation	local	192 mg/m³
Worker DNEL, acute		inhalation	local	384 mg/m³
Worker DNEL, long-term		dermal	systemic	384 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	56,5 mg/m³
Consumer DNEL, acute		inhalation	systemic	226 mg/m³
Consumer DNEL, long-term		inhalation	local	56,5 mg/m³
Consumer DNEL, acute		inhalation	local	226 mg/m³
Consumer DNEL, long-term		dermal	systemic	226 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	8,13 mg/kg bw/day

PNEC values

CAS No	Substance	Value
Environmental compartment		
112-07-2	2-butoxyethyl acetate; butylglycol acetate	
Freshwater		0,304 mg/l
Freshwater (intermittent releases)		0,56 mg/l
Marine water		0,03 mg/l
Freshwater sediment		2,03 mg/kg
Marine sediment		0,203 mg/kg
Secondary poisoning		60 mg/kg
Micro-organisms in sewage treatment plants (STP)		90 mg/l
Soil		0,415 mg/kg
123-86-4	n-butyl acetate	
Freshwater		0,18 mg/l
Freshwater (intermittent releases)		0,36 mg/l
Marine water		0,018 mg/l
Freshwater sediment		0,981 mg/kg
Marine sediment		0,098 mg/kg
Micro-organisms in sewage treatment plants (STP)		35,6 mg/l
Soil		0,09 mg/kg
108-88-3	toluene	
Freshwater		0,68 mg/l
Freshwater (intermittent releases)		0,68 mg/l
Marine water		0,68 mg/l
Freshwater sediment		16,39 mg/kg
Marine sediment		16,39 mg/kg
Micro-organisms in sewage treatment plants (STP)		13,61 mg/l
Soil		2,89 mg/kg

8.2. Exposure controls



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Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Suitable gloves type:

Butyl caoutchouc (butyl rubber)

Thickness of the glove material $\geq 0,3$ mm

Breakthrough time:: 60 min.

NBR (Nitrile rubber)

Thickness of the glove material $\geq 0,9$ mm

Breakthrough time:: 30 min.

Unsuitable material:

CR (polychloroprene, chloroprene rubber), NR (natural rubber, Natural latex), PVC (polyvinyl chloride)

Skin protection

Use of protective clothing.

Respiratory protection

Respiratory protection necessary at: high concentrations

Full-/half-/quarter-face masks (EN 136/140) Combination filtering device (EN 14387)

Filter types: A, B, E, K. Class 1: Maximum permitted contaminant concentration in inhaled air = 1000 mL/m³ (0.1 % by vol.); class 2: maximum permitted contaminant concentration in inhaled air = 5000 mL/m³ (0.5 % by vol.);

class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m³ (1.0 % by vol.)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	colourless clear
Odour:	Ammonia
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	120 °C
Flammability:	not applicable not applicable
Lower explosion limits:	1,2 vol. %
Upper explosion limits:	8,4 vol. %
Flash point:	35 °C
Auto-ignition temperature:	420 °C
Decomposition temperature:	not determined
pH-Value:	not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.
Solubility in other solvents	not determined

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Partition coefficient n-octanol/water: not determined
Vapour pressure (at 20 °C): 11 hPa
Density (at 20 °C): 0,93 g/cm³
Relative vapour density: not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not: Explosive.

Oxidizing properties

The product is not: oxidising.

Other safety characteristics

Evaporation rate: not determined

Solvent content: 60%

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

ATEmix calculated

ATE (oral) 1365 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-07-2	2-butoxyethyl acetate; butylglycol acetate				
	oral	LD50 ca. 1880 mg/kg	Rat	Study report (1963)	OECD Guideline 401
	dermal	LD50 ca. 1500 mg/kg	Rabbit	Toxicol Appl Pharmac 51, 117-27 (1979)	Modification of the Draize 1959 method u
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 2,66 mg/l	Rat		

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Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
475645-84-2	Cyclosilazanes, di-Me, Me hydrogen, polymers with di-Me, Me hydrogen silazanes, reaction products with				
	oral	ATE 500 mg/kg			
123-86-4	n-butyl acetate				
	oral	LD50 14130 mg/kg	Rat	Publication (1954)	acute oral toxicity test
	inhalation (4 h) vapour	LC50 > 6,6 mg/l	Rat	Study report (1988)	OECD Guideline 403
919-30-2	3-aminopropyltriethoxysilane				
	oral	ATE 500 mg/kg			
108-88-3	toluene				
	dermal	LD50 12200 mg/kg	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50 49 mg/l	Rat	GESTIS	

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h][d]	Species	Source	Method
112-07-2	2-butoxyethyl acetate; butylglycol acetate					
	Acute fish toxicity	LC50 > 20 - < 40 mg/l	96 h	Oncorhynchus mykiss	Toxicol Mech & meth 12, 255-63 (2002)	OECD Guideline 203
	Acute algae toxicity	ErC50 1570 mg/l	72 h	Pseudokirchneriella subcapitata	Toxicol Mech & meth 12, 255-63 (2002)	ISO 8692
	Acute crustacea toxicity	EC50 67,5 mg/l	48 h	Daphnia magna	Toxicol Mech & meth 12, 255-63 (2002)	ISO 6341
123-86-4	n-butyl acetate					
	Acute fish toxicity	LC50 18 mg/l	96 h	Pimephales promelas	Publication (1984)	OECD Guideline 203
	Acute crustacea toxicity	EC50 44 mg/l	48 h	Daphnia sp.	Publication (1959)	OECD Guideline 202
	Crustacea toxicity	NOEC 23,2 mg/l	21 d	Daphnia magna	Study report (2000)	OECD Guideline 211
108-88-3	toluene					
	Acute fish toxicity	LC50 13 mg/l	96 h	Carassius auratus	IUCLID	
	Acute algae toxicity	ErC50 12,5 mg/l	72 h	Selenastrum capricornutum	Galassi et al. 1988	

12.2. Persistence and degradability

The product has not been tested.

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CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-07-2	2-butoxyethyl acetate; butylglycol acetate			
	OECD 301F	88%	28	
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-07-2	2-butoxyethyl acetate; butylglycol acetate	1,51
123-86-4	n-butyl acetate	1,82
108-88-3	toluene	2,73

BCF

CAS No	Chemical name	BCF	Species	Source
123-86-4	n-butyl acetate	15		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

The product has not been tested.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

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

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

140603 WASTE ORGANIC SOLVENTS, REFRIGERANTS AND PROPELLANTS (EXCEPT 07 AND 08); waste organic solvents, refrigerants and foam/aerosol propellants; other solvents and solvent mixtures; hazardous waste

List of Wastes Code - contaminated packaging

150107 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); glass packaging

Contaminated packaging

Hazardous waste according to Directive 2008/98/EC (waste framework directive). Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 2924

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14.2. UN proper shipping name:

FLAMMABLE LIQUID, CORROSIVE, N.O.S.

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3+8



Classification code:

FC

Special Provisions:

274

Limited quantity:

1 L

Excepted quantity:

E2

Transport category:

2

Hazard No:

338

Tunnel restriction code:

D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:

UN 2924

14.2. UN proper shipping name:

FLAMMABLE LIQUID, CORROSIVE, N.O.S.

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3+8



Classification code:

FC

Special Provisions:

274

Limited quantity:

1 L

Excepted quantity:

E2

Marine transport (IMDG)

14.1. UN number or ID number:

UN 2924

14.2. UN proper shipping name:

FLAMMABLE LIQUID, CORROSIVE, N.O.S.

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

3+8



Special Provisions:

274

Limited quantity:

1 L

Excepted quantity:

E2

EmS:

F-E, S-C

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:

UN 2924

14.2. UN proper shipping name:

FLAMMABLE LIQUID, CORROSIVE, N.O.S.

14.3. Transport hazard class(es):

3

14.4. Packing group:

II

Hazard label:

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Special Provisions:	A3
Limited quantity Passenger:	0.5 L
Passenger LQ:	Y340
Excepted quantity:	E2
IATA-packing instructions - Passenger:	352
IATA-max. quantity - Passenger:	1 L
IATA-packing instructions - Cargo:	363
IATA-max. quantity - Cargo:	5 L

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 40, Entry 48, Entry 75

Directive 2010/75/EU on industrial emissions: 60,1 % (558,93 g/l)

Directive 2004/42/EC on VOC in paints and varnishes: 60,1 % (558,93 g/l)

Information according to Directive 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 2 - obviously hazardous to water

Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 8.

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

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EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Flam. Liq: Flammable liquids

Acute Tox: Acute toxicity

Asp. Tox: Aspiration hazard

Skin Corr: Skin corrosion

Skin Irrit: Skin irritation

Eye Dam: Eye damage

Skin Sens: Skin sensitisation

Repr: Reproductive toxicity

STOT SE: Specific target organ toxicity - single exposure

STOT RE: Specific target organ toxicity - repeated exposure

Aquatic Chronic

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Flam. Liq. 3; H226	On basis of test data
Acute Tox. 4; H302	Calculation method
Asp. Tox. 1; H304	Calculation method
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.



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Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)