

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 16/04/2015 Revision date: 18/03/2024 Supersedes version of: 04/02/2022 Version: 14.0

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

1.1. Product identifier

Product form : Substance

: 8-HYDROXYQUINOLINE Substance name

Chemical name : 8-Quinolinol FC Index-No. : 613-324--00-8 EC-No. : 205-711-1 CAS-No. : 148-24-3 Product code : B2020 Product group : End product

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

1.2.1. Relevant identified uses

: Professional use Main use category Use of the substance/mixture : Laboratory chemicals : Laboratory chemicals Function or use category

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Elemental Microanalysis Ltd

1 Hameldown Road

Okehampton, Devon, EX20 1UB

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T +44 1837 54446

enquiries@microanalysis.co.uk, https://www.elementalmicroanalysis.com/

1.4. Emergency telephone number

Emergency number : +44 (0) 7990 767375

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302 Serious eye damage/eye irritation, Category 1 H318 Skin sensitisation, Category 1 H317 Reproductive toxicity, Category 1B H360

Hazardous to the aquatic environment – Acute Hazard, Category 1 H400 (M=10)Hazardous to the aquatic environment - Chronic Hazard, Category 1 H410 (M=10)

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

Adverse physicochemical, human health and environmental effects

May damage fertility or the unborn child. Harmful if swallowed. May cause an allergic skin reaction. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05







GHS08

GHS07

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Signal word (CLP) : Danger

Hazard statements (CLP) : H302 - Harmful if swallowed.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage.

H360 - May damage fertility or the unborn child. H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) : P201 - Obtain special instructions before use.

P280 - Wear eye protection, protective clothing, protective gloves.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER, a doctor.

P308+P313 - IF exposed or concerned: Get medical advice/attention. P321 - Specific treatment (see supplemental first aid instruction on this label).

P391 - Collect spillage.

2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent
Name : 8-HYDROXYQUINOLINE

CAS-No. : 148-24-3 EC-No. : 205-711-1 EC Index-No. : 613-324--00-8

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
QUINOLIN-8-OL	CAS-No.: 148-24-3 EC-No.: 205-711-1 EC Index-No.: 613-324-00-8	100	Repr. 1B, H360D Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

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

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash

occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after skin contact : May cause an allergic skin reaction.

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Symptoms/effects after eye contact : Serious damage to eyes.

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 : Water spray. Dry powder. Foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Only qualified personnel equipped with suitable protective equipment may intervene. Avoid

breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Mechanically recover the product. Notify authorities if product enters sewers or public

waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Obtain special instructions before use. Do not

handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing

dust/fume/gas/mist/vapours/spray.

Hygiene measures : Separate working clothes from town clothes. Launder separately. Contaminated work

clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

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7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

No additional information available

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

8-HYDROXYQUINOLINE (148-24-3)			
DNEL/DMEL (Workers)			
Long-term - systemic effects, dermal	0.933 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	3.29 mg/m³		
DNEL/DMEL (General population)	DNEL/DMEL (General population)		
Long-term - systemic effects,oral	0.333 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	0.58 mg/m³		
Long-term - systemic effects, dermal	0.333 mg/kg bodyweight/day		
PNEC (Water)			
PNEC aqua (freshwater)	0.225 μg/l		
PNEC aqua (marine water)	22.5 ng/l		
PNEC aqua (intermittent, freshwater)	2.25 μg/l		
PNEC aqua (intermittent, marine water)	0.225 μg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	0.855 ng/kg dw		
PNEC sediment (marine water)	85.5 ng/kg dw		
PNEC (Soil)			
PNEC soil	39 ng/kg dw		
PNEC (STP)			
PNEC sewage treatment plant	0.2 mg/l		

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

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8.2.2. Personal protection equipment

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Colour : white.

Molecular mass : 145.17 g/mol Source: ChemIDplus

Odour : Characteristic odour.

Odour threshold : Not available

Melting point : 76 °C Atm. press.: 1013,25 hPa Decomposition: 'no'

Freezing point : Not applicable

Boiling point : \approx 267 °C Atm. press.: 1013,25 hPa Decomposition: 'no'

Flammability Non flammable. **Explosive limits** Not applicable Not applicable Lower explosion limit Upper explosion limit Not applicable Flash point Not applicable Auto-ignition temperature No data available. Decomposition temperature Not available pΗ No data available. pH solution Not available Viscosity, kinematic Not applicable

Solubility : Water: 556 mg/l at 20 °C Source: HSDB

Partition coefficient n-octanol/water (Log Kow) : Not available

Partition coefficient n-octanol/water (Log Pow) : 2.02 Source: ChemIDplus Vapour pressure : 0.2213 Pa Temp.: 25 °C

Vapour pressure at 50°C : Not available

Density : Not available

Relative density : 1.034 Source: HSDB

Relative vapour density at 20°C : 5.01 Source: Calculated value based on molecular weight and mean molecular weight of air

Particle size : Not available

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9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

8-HYDROXYQUINOLINE (148-24-3)	
LD50 oral rat	1200 mg/kg Source: HSDB
LD50 dermal rat	> 10000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

QUINOLIN-8-OL (148-24-3)	
LD50 oral rat	1200 mg/kg Source: HSDB
LD50 dermal rat	> 10000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Skin corrosion/irritation :	Not classified

Skin corrosion/irritation : Not classified pH: No data available.

QUINOLIN-8-OL (148-24-3)	
рН	No data available.

Serious eye damage/irritation : Causes serious eye damage. pH: No data available.

QUINOLIN-8-OL (148-24-3)		
	рН	No data available.
	Respiratory or skin sensitisation :	May cause an allergic skin reaction.

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Germ cell mutagenicity	:	Not classified
Carcinogenicity		Not classified

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IARC group	3 - Not classifiable
QUINOLIN-8-OL (148-24-3)	
IARC group	3 - Not classifiable

: May damage fertility or the unborn child. Reproductive toxicity

8-HYDROXYQUINOLINE (148-24-3)	
NOAEL (animal/male, F0/P)	200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (animal/female, F0/P)	200 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

QUINOLIN-8-OL (148-24-3)	
NOAEL (animal/male, F0/P)	200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (animal/female, F0/P)	200 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
STOT-single exposure	· Not classified

STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified

8-HYDROXYQUINOLINE (148-24-3)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
QUINOLIN-8-OL (148-24-3)	

(Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422

Aspiration hazard : Not classified

8-HYDROXYQUINOLINE (148-24-3)	
Viscosity, kinematic	Not applicable

11.2. Information on other hazards

No additional information available

NOAEL (oral, rat, 90 days)

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Hazardous to the aquatic environment, short-term : Very toxic to aquatic life. (acute)

Hazardous to the aquatic environment, long-term

(chronic)

: Very toxic to aquatic life with long lasting effects.

Not rapidly degradable

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8-HYDROXYQUINOLINE (148-24-3)	
LC50 - Fish [1]	45 mg/l Test organisms (species): other:
LC50 - Fish [2]	63.13 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	2.4 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.039 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.225 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	97.859 mg/l Source: ECOSAR
QUINOLIN-8-OL (148-24-3)	
LC50 - Fish [1]	45 mg/l Test organisms (species): other:
LC50 - Fish [2]	63.13 mg/l Test organisms (species): other:
EC50 - Crustacea [1]	2.4 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.039 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.225 mg/l Test organisms (species): Raphidocelis subcapitata (previous names: Pseudokirchneriella subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	97.859 mg/l Source: ECOSAR

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

8-HYDROXYQUINOLINE (148-24-3)	
Partition coefficient n-octanol/water (Log Pow)	2.02 Source: ChemIDplus
QUINOLIN-8-OL (148-24-3)	
Partition coefficient n-octanol/water (Log Pow)	2.02 Source: ChemIDplus

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

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HP Code

: HP6 - "Acute Toxicity:" waste which can cause acute toxic effects following oral or dermal administration, or inhalation exposure.

HP4 - "Irritant - skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

HP10 - "Toxic for reproduction:" waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring. HP13 - "Sensitising:" waste which contains one or more substances known to cause sensitising effects to the skin or the respiratory organs.

HP14 - "Ecotoxic:" waste which presents or may present immediate or delayed risks for one or more sectors of the environment

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SECTION 14: Transport information

ADR	IMDG	IATA	ADN	RID
Special provision(s) applied : 375	Special provision(s) applied : 969	Special provision(s) applied : A197	Special provision(s) applied : 375	Special provision(s) applied : 375
These substances when carried in single or combination packagings containing a net quantity per single or inner packaging of 5 l or less for liquids or having a net mass per single or inner packaging of 5 kg or less for solids, are not subject to any other provisions of ADR provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.				
14.1. UN number or ID number				
UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shippin	g name			

14.2. UN proper shipping name				
ENVIRONMENTALLY	ENVIRONMENTALLY	Environmentally hazardous	ENVIRONMENTALLY	ENVIRONMENTALLY
HAZARDOUS	HAZARDOUS	substance, solid, n.o.s.	HAZARDOUS	HAZARDOUS
SUBSTANCE, SOLID,	SUBSTANCE, SOLID,	(QUINOLIN-8-OL)	SUBSTANCE, SOLID,	SUBSTANCE, SOLID,
N.O.S. (QUINOLIN-8-OL)	N.O.S. (QUINOLIN-8-OL)		N.O.S. (QUINOLIN-8-OL)	N.O.S. (QUINOLIN-8-OL)
	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,	HAZARDOUS HAZARDOUS SUBSTANCE, SOLID, SUBSTANCE, SOLID,	ENVIRONMENTALLY ENVIRONMENTALLY Environmentally hazardous substance, solid, n.o.s. SUBSTANCE, SOLID, (QUINOLIN-8-OL)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, ENVIRONMENTALLY Environmentally hazardous substance, solid, n.o.s. HAZARDOUS SUBSTANCE, SOLID, (QUINOLIN-8-OL) SUBSTANCE, SOLID,

Transport document description

UN 3077	UN 3077	UN 3077 Environmentally	UN 3077	UN 3077
ENVIRONMENTALLY	ENVIRONMENTALLY	hazardous substance, solid,	ENVIRONMENTALLY	ENVIRONMENTALLY
HAZARDOUS	HAZARDOUS	n.o.s. (QUINOLIN-8-OL), 9,	HAZARDOUS	HAZARDOUS
SUBSTANCE, SOLID,	SUBSTANCE, SOLID,	III	SUBSTANCE, SOLID,	SUBSTANCE, SOLID,
N.O.S. (QUINOLIN-8-OL),	N.O.S. (QUINOLIN-8-OL),		N.O.S. (QUINOLIN-8-OL),	N.O.S. (QUINOLIN-8-OL),
9, III, (-)	9, III, MARINE		9, III	9, III
	POLLUTANT			

14.3. Transport hazard class(es)

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14.4. Packing group

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14.5. Environmental nazards				
Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the	Dangerous for the
environment: Yes	environment: Yes	environment: Yes	environment: Yes	environment: Yes

No supplementary information available

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Marine pollutant: Yes

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14.6. Special precautions for user

Overland transport

Classification code (ADR) : M7

Special provisions (ADR) : 274, 335, 375, 601

Limited quantities (ADR) : 5kg Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR) : PP12, B3
Mixed packing provisions (ADR) : MP10

Portable tank and bulk container instructions (ADR) : T1, BK1, BK2, BK3

Portable tank and bulk container special provisions : TP33

(ADR)

Tank code (ADR) : SGAV, LGBV

Vehicle for tank carriage : AT
Transport category (ADR) : 3
Special provisions for carriage - Packages (ADR) : V13
Special provisions for carriage - Bulk (ADR) : VC1, VC2
Special provisions for carriage - Loading, unloading : CV13

and handling (ADR)

Hazard identification number (Kemler No.) : 90

Orange plates :

90 3077

Tunnel restriction code (ADR) : -EAC code : 2Z

Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967, 969

Limited quantities (IMDG) : 5 kg
Excepted quantities (IMDG) : E1
Packing instructions (IMDG) : LP02, P002
Special packing provisions (IMDG) : PP12
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B3

Tank instructions (IMDG) : BK1, BK2, BK3, T1

Tank special provisions (IMDG) : TP33
EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-F
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW23

Air transport

PCA Excepted quantities (IATA) : E1
PCA Limited quantities (IATA) : Y956
PCA limited quantity max net quantity (IATA) : 30kgG
PCA packing instructions (IATA) : 956
PCA max net quantity (IATA) : 400kg
CAO packing instructions (IATA) : 956
CAO max net quantity (IATA) : 400kg

Special provisions (IATA) : A97, A158, A179, A197, A215

ERG code (IATA) : 9L

Inland waterway transport

Classification code (ADN) : M7

Special provisions (ADN) : 274, 335, 375, 601

Limited quantities (ADN) : 5 kg

Excepted quantities (ADN) : E1

Carriage permitted (ADN) : T* B**

Equipment required (ADN) : PP, A***

Number of blue cones/lights (ADN) : 0

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Additional requirements/Remarks (ADN) : * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. *** Only in the case of

transport in bulk.

: TP33

Rail transport

Classification code (RID) : M7

Special provisions (RID) : 274, 335, 375, 601

Limited quantities (RID) : 5kg
Excepted quantities (RID) : E1

Packing instructions (RID) : P002, IBC08, LP02, R001

Special packing provisions (RID) : PP12, B3
Mixed packing provisions (RID) : MP10

Portable tank and bulk container instructions (RID) : T1, BK1, BK2, BK3

Portable tank and bulk container special provisions

(RID)

Tank codes for RID tanks (RID) : SGAV, LGBV

Transport category (RID) : 3
Special provisions for carriage – Packages (RID) : W13
Special provisions for carriage – Bulk (RID) : VC1, VC2
Special provisions for carriage - Loading, unloading : CW13, CW31

and handling (RID)

Colis express (express parcels) (RID) : CE11 Hazard identification number (RID) : 90

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

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SECTION 16: Other information

Abbreviations and acr	onyms:
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H301	Toxic if swallowed.	
H302	Harmful if swallowed.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H360	May damage fertility or the unborn child.	
H360D	May damage the unborn child.	
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
Repr. 1B	Reproductive toxicity, Category 1B	
Skin Sens. 1	Skin sensitisation, Category 1	

The classification complies with

: ATP 12

Safety Data Sheet (SDS)_EMAL, EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.