

SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

Product name: EK-CryoFuel DyePack

Creation date: 03.07.2019, Revision: 13.10.2023, version: 1.1

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

1.1 Product identifier

Product name

EK-CryoFuel DyePack

UFI:

XJXA-J9M6-F004-CG58



<https://my.chemius.net/p/ZnhSWy/en/pd/en>

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

Relevant identified uses

Dyes for computer coolants.

Uses advised against

Not for consumption.

1.3 Details of the supplier of the safety data sheet

Manufacturer

KIMI d.o.o.

Planjava 1

1236 Trzin, Slovenia

+386 1 5300 550

info@kimi.si

1.4 Emergency Telephone Number

Emergency

112

Manufacturer

+386 1 5300 550

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Skin Sens. 1; H317 May cause an allergic skin reaction.

2.2 Label elements

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



Signal word: WARNING

H317 May cause an allergic skin reaction.
 P102 Keep out of reach of children.
 P501 Dispose of contents/container in accordance with national regulation.

Contains:

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

2.3 Other hazards

PBT/vPvB

No information.

Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

Additional information

The mixture does not contain substance(s) included in the list established in accordance with Article 59 of REACH for having endocrine disrupting properties, or substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9 - 613-167-00-5	0,01-0,1	Acute Tox. 3; H301 Acute Tox. 2; H310 Skin Corr. 1C; H314 Skin Sens. 1A; H317 Eye Dam. 1; H318 Acute Tox. 2; H330 Aquatic Acute 1; H400; M = 100 Aquatic Chronic 1; H410; M = 100 EUH071	Skin Corr. 1C; H314; C ≥ 0.6% Skin Irrit. 2; H315; 0.06% ≤ C < 0.6% Skin Sens. 1A; H317; C ≥ 0.0015% Eye Dam. 1; H318; C ≥ 0.6% Eye Irrit. 2; H319; 0.06% ≤ C < 0.6%	B

Notes for substances

B	<p>Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations.</p> <p>In Part 3 entries with Note B have a general designation of the following type: "nitric acid ... %".</p> <p>In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.</p>
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SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. Show the safety data sheet and label to the physician. When in doubt or if feeling unwell seek medical assistance.

Following inhalation

Remove patient to fresh air - move out of dangerous area. If symptoms develop and persist, seek medical attention.

Following skin contact

If symptoms develop and persist, seek medical attention.

Following eye contact

If irritation persists, seek professional medical attention. Immediately flush eyes with running water, keeping eyelids apart.

Following ingestion

Do not induce vomiting! Show the physician the safety data sheet or label. Rinse mouth thoroughly with water. Consult a physician. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed**Following inhalation**

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.

Following skin contact

Contact with skin may cause irritation (redness, itching). May cause sensitisation by skin contact (itching, redness, rashes).

Following eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

Following ingestion

May cause nausea/vomiting and diarrhea.

4.3 Indication of any immediate medical attention and special treatment needed

No information.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media**Suitable extinguishing media**

Carbon dioxide. Dry chemical powder. Water spray. Alcohol resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture**Hazardous combustion products**

In case of a fire toxic gases can be generated; do not inhale gases/smoke.

5.3 Advice for firefighters**Protective actions**

No information.

Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

Additional information

No information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation.

Emergency procedures

No information.

For emergency responders

No information.

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. In case of release into the environment, inform the relevant authorities.

6.3 Methods and material for containment and cleaning up

For containment

No information.

For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

Other information

No information.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

Ensure adequate ventilation.

Measures to prevent aerosol and dust generation

Avoid formation of aerosols.

Measures to protect the environment

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures

No information.

Advice on general occupational hygiene

Do not eat, drink or smoke while working. Do not breathe vapours/mist. Use good personal hygiene practices – wash hands at breaks and when done working with material.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep away from food, drink and animal feeding stuffs. Store at room temperature. Keep out of the reach of children.

Packaging materials

Store only in original container.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. Do not store in unlabelled containers.

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)**Recommendations**

No information.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****Occupational Exposure limit values**

Name	mg/m ³	ml/m ³	Short-term value mg/m ³	Short-term value ml/m ³	Remark	Biological Tolerance Values
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0.076	/	/	/	TWA (CMI)	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	1.5	/	/	/	TWA (MI)	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	0.23	/	/	/	STEL (CMI)	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	4.5	/	/	/	STEL (MI)	/

Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values**For product**

No information.

For components

Name	Type	Exposure route	exp. frequency	Remark	value
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Worker	inhalation	long term local effects	/	0.02 mg/m ³

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Worker	inhalation	short term local effects	/	0.04 mg/m ³
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	inhalation	long term local effects	/	0.02 mg/m ³
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	inhalation	short term local effects	/	0.04 mg/m ³
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	oral	long term systemic effects	/	0.09 mg/kg bw/day
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Consumer	oral	short term systemic effects	/	0.11 mg/kg bw/day

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	value
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	fresh water	/	3.39 µg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	water, intermittent release	fresh water	3.39 µg/L
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	marine water	/	3.39 µg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	water, intermittent release	marine water	3.39 µg/l
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	water treatment plant	/	0.23 mg/L
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	fresh water sediment	dry weight	0.027 mg/kg
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	marine water sediment	dry weight	0.027 mg/kg
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	soil	dry weight	0.01 mg/kg

8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

Personal protective equipment**Eye and face protection**

Safety glasses with side protection (BS EN ISO 16321-1:2022).

Hand protection

Protective gloves (EN ISO 374-1:2016).

Appropriate materials**Skin protection**

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2022).

Respiratory protection

No information.

Thermal hazards

No information.

Environmental exposure controls**Substance/mixture related measures to prevent exposure**

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties****Physical state**

liquid

Colour

red yellow blue

Odour

characteristic

Important health, safety and environmental information

Odour threshold	No information.
Melting point/Freezing point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.
Lower and upper explosion limit	No information.
Flash point	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	ca. 7 at 20 °C
Viscosity	No information.
Solubility	No information.
Partition coefficient	No information.
Vapour pressure	No information.
Density and/or relative density	Density: ca. 1 g/cm ³ at 20 °C
Relative vapour density	No information.
Particle characteristics	No information.

9.2 Other information

Explosive properties

No information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No information.

10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

No information.

10.4 Conditions to avoid

No information.

10.5 Incompatible materials

No information.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11: TOXICOLOGICAL INFORMATION

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

(a) Acute toxicity

For components

Name	Exposure route	Type	Species	Time	value	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	oral	LD ₅₀	rat	/	49.6 - 75 mg/kg	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	inhalation (aerosol)	LC ₅₀	rat	4 h	0.33 mg/l	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	dermal	LD ₅₀	rabbit	/	141 mg/kg	/	/

Additional information

The product is not classified as acutely toxic.

(b) Skin corrosion/irritation

For components

Name	Species	Time	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	rabbit	/	Corrosive	OECD 404	/

Additional information

The product is not classified as irritating to skin and eyes.

(c) Serious eye damage/irritation

For components

Name	Exposure route	Species	Time	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	rabbit	/	Corrosive.	/	/

(d) Respiratory or skin sensitisation

For components

Name	Exposure route	Species	Time	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	dermal	/	/	May cause sensitisation by skin contact.	/	/

Additional information

May cause an allergic skin reaction. It contains at least one ingredient that can cause sensitisation. Can cause allergic reaction.

(e) (Germ cell) mutagenicity

For components

Name	Type	Species	Time	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	/	/	Not mutagenic.	/	/

(f) Carcinogenicity

For components

Name	Exposure route	Type	Species	Time	value	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	/	/	/	/	Not carcinogenic.	/	/

(g) Reproductive toxicity

For components

Name	Reproductive toxicity type	Type	Species	Time	value	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	/	/	/	/	/	Not toxic for reproduction.	/	/

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	-	-	/	/	/	/	/	Symptoms: mucosal inflammation, tearing.	/	/

Additional information

STOT SE (single exposure): Not classified.

(i) STOT-repeated exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	inhalation	-	/	/	/	/	/	Excessive exposure may cause irritation of the upper respiratory tract (nose and throat).	/	/

Additional information

STOT RE (repeated exposure): Not classified.

(j) Aspiration hazard

For components

Name	result	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	During ingestion or vomiting, inhalation into the lungs may occur, which can cause tissue damage or lung injury.	/	/

Additional information

Aspiration hazard: Not classified.

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

11.2 Information on other hazards

Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

Other information

No information.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Acute (short-term) toxicity

For components

Name	Type	value	Exposure time	Species	organism	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	LC ₅₀	0.19 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	LC ₅₀	0.28 mg/L	96 h	fish	<i>Lepomis macrochirus</i>	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	EC ₅₀	0.16 mg/L	48 h	crustacea	<i>Daphnia magna</i>	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	EC ₅₀	0.018 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	/	/
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	EC ₅₀	4.5 mg/L	/	bacteria	Activated sludge	/	respiration inhibitor

Chronic (long-term) toxicity

For components

Name	Type	value	Exposure time	Species	organism	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	NOEC	0.01 mg/l	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	/	/

12.2 Persistence and degradability

Abiotic degradation, physical- and photo-chemical elimination

For components

Name	Environment	Type / Method	Half Time	Evaluation	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Air	photodegradation	0.38 - 1.3 days	50%	/	half-life

Biodegradation

For components

Name	Type	Rate	Time	Evaluation	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	aerobic	30 %	28 days	not readily biodegradable	OECD 301 B	/

12.3 Bioaccumulative potential

Partition coefficient

For components

Name	Media	value	Temperature °C	pH	Concentration	Method
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Octanol-water (log Pow)	-0.71 - 0.75	/	/	/	/

Bioconcentration factor (BCF)

For components

Name	Species	organism	value	Duration	Evaluation	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	BCF	/	3.6	/	/	/	/

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

No information.

Surface tension

No information.

Adsorption/Desorption

For components

Name	Type	Criterion	value	Evaluation	Method	Remark
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Soil	/	28	/	/	Koc, estimation

12.5 Results of PBT and vPvB assessment

No evaluation.

12.6 Endocrine disrupting properties

The product does not contain substances with the potential for endocrine disorders.

12.7 Other adverse effects

No information.

12.8 Additional information

For product

Do not allow to reach ground water, water courses or sewage system. Product is not classified as dangerous for environment.

For components

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

This substance is not in Annex I of Regulation (EC) 2037/2000 on substances that deplete the ozone layer.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product / Packaging disposal

Waste chemical

Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

08 01 20 - aqueous suspensions containing paint or varnish other than those mentioned in 080119

Packaging

Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

15 01 02 - plastic packaging

Waste treatment-relevant information

No information.

Sewage disposal-relevant information

No information.

Other disposal recommendations

No information.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.	Not dangerous according to transport regulations.
14.2 UN proper shipping name			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.3 Transport hazard class(es)			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.4 Packing group			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			
Limited quantities Not given/not applicable	Limited quantities Not given/not applicable		Limited quantities Not given/not applicable
14.7 Maritime transport in bulk according to IMO instruments			
	Not given/not applicable		

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline) not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents

No information.

Special instructions

No information.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

Indication of changes

2.2 Label elements 2.3 Other hazards 3.2 Mixtures 4.1 Description of first aid measures 6.2 Environmental precautions 6.3 Methods and material for containment and cleaning up 8.2 Exposure controls 9.1 Information on basic physical and chemical properties 9.2 Other information 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008 12.6 Endocrine disrupting properties 12.7 Other adverse effects 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture 15.2 Chemical Safety Assessment

Key literature references and sources for data

No information.

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
 ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
 ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 CEN - European Committee for Standardisation
 C&L - Classification and Labelling
 CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
 CAS# - Chemical Abstracts Service number
 CMR - Carcinogen, Mutagen, or Reproductive Toxicant
 CSA - Chemical Safety Assessment
 CSR - Chemical Safety Report
 DMEL - Derived Minimal Effect Level
 DNEL - Derived No Effect Level
 DPD - Dangerous Preparations Directive 1999/45/EC
 DSD - Dangerous Substances Directive 67/548/EEC
 DU - Downstream User
 EC - European Community
 ECHA - European Chemicals Agency
 EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
 EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
 EEC - European Economic Community
 EINECS - European Inventory of Existing Commercial Substances
 ELINCS - European List of notified Chemical Substances
 EN - European Standard
 EQS - Environmental Quality Standard
 EU - European Union
 Euphrac - European Phrase Catalogue
 EWC - European Waste Catalogue (replaced by LoW – see below)
 GES - Generic Exposure Scenario
 GHS - Globally Harmonized System
 IATA - International Air Transport Association
 ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
 IMDG - International Maritime Dangerous Goods

IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H301 Toxic if swallowed.
H310 Fatal 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.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.