

SAFETY DATA SHEET

 ACCORDING TO REGULATION (EC) 1907/2006**Product name:** EK-CRYOFUEL PREMIX CLEAR / SOLID**Creation date:** 21.05.2021, **Revision:** 17.07.2023, **version:** 2.1

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

1.1 Product identifier

Product name

EK-CRYOFUEL PREMIX CLEAR / SOLID

Synonyms

EK-CryoFuel Clear Premix 1000mL (EAN 3831109813256) | EK-CryoFuel
Blood Red Premix 1000mL (EAN 3831109813263) | EK-CryoFuel Navy
Blue Premix 1000mL (EAN 3831109813270) | EK-CryoFuel Lime Yellow
Premix 1000mL (EAN 3831109813287) | EK-CryoFuel Acid Green Premix
1000mL (EAN 3831109813294) | EK-CryoFuel Amber Orange Premix
1000mL (EAN 3831109810408) | EK-CryoFuel Indigo Violet Premix
1000mL (EAN 3831109810415) | EK-CryoFuel Solid Electric Purple
Premix 1000mL (EAN 3831109880340) | EK-CryoFuel Solid Azure Blue
Premix 1000mL (EAN 3831109880357) | EK-CryoFuel Solid Neon Green
Premix 1000mL (EAN 3831109880364) | EK-CryoFuel Solid Cloud White
Premix 1000mL (EAN 3831109880302) | EK-CryoFuel Solid Laguna
Yellow Premix 1000mL (EAN 3831109880319) | EK-CryoFuel Solid Fire
Orange Premix 1000mL (EAN 3831109880326) | EK-CryoFuel Solid
Scarlet Red Premix 1000mL (EAN 3831109880333) | EK-CryoFuel Power
Pink Premix 1000 mL (EAN 3831109816134) | EK-CryoFuel Clear Premix
200 mL (NVIDIA) (EAN 3830046996817) | EK-CryoFuel Mystic Fog
Premix 1000 mL (EAN 3831109829912)

<https://my.chemius.net/p/QYAhs0/en/pd/en>

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

Relevant identified uses

Coolant for water cooling of computer systems.

Uses advised against

Not for consumption.

1.3 Details of the supplier of the safety data sheet

Supplier

EKWB d.o.o.
Poslovna Cona Pod Lipami 18
1218 Komenda, Slovenia
0590 96610

Manufacturer

KIMI d.o.o.
Planjava 1
1236 Trzin, Slovenia
+386 1 5300 550
info@kimi.si

1.4 Emergency Telephone Number

Emergency

112

Supplier

0590 96610

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

According to the regulation, the chemical is not classified as hazardous.

2.2 Label elements

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

EUH208 Contains reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

P102 Keep out of reach of children.

P501 Dispose of contents/container in accordance with national regulations.

2.3 Other hazards

PBT/vPvB

No information.

Endocrine disrupting properties

No information.

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
sodium 2-ethylhexanoate	19766-89-3 243-283-8 -	0,1-1	Repr. 2; H361d	/	/
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	<0.0015	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

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.

In Part 3 entries with Note B have a general designation of the following type: "nitric acid ... %".

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.

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.

Following inhalation

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

Following skin contact

Take off all contaminated clothing. If symptoms develop and persist, seek medical attention. Areas of the body that have come into contact with the product must be rinsed with water.

Following eye contact

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

Following ingestion

Do not induce vomiting! Rinse mouth thoroughly with water. In case of doubt or if feeling unwell seek medical help. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

No information.

Following skin contact

No information.

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. If accidental large entry into water or ground occurs, inform responsible 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

No information.

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

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

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep in cool and well ventilated area. Keep away from food, drink and animal feeding stuffs.

Packaging materials

The original container of producer.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking.

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**

No information.

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
sodium 2-ethylhexanoate	Worker	dermal	long term systemic effects	/	2 mg/kg bw/day
sodium 2-ethylhexanoate	Worker	inhalation	long term systemic effects	/	14 mg/m ³
sodium 2-ethylhexanoate	Consumer	oral	long term systemic effects	/	1 mg/kg bw/day
sodium 2-ethylhexanoate	Consumer	dermal	long term systemic effects	/	1 mg/kg bw/day
sodium 2-ethylhexanoate	Consumer	inhalation	long term systemic effects	/	3.5 mg/m ³

PNEC values

For product

No information.

For components

Name	Exposure route	Remark	value
sodium 2-ethylhexanoate	fresh water	/	0.36 mg/L
sodium 2-ethylhexanoate	marine water	/	0.036 mg/L
sodium 2-ethylhexanoate	water, intermittent release	/	0.493 mg/L
sodium 2-ethylhexanoate	fresh water sediment	dry weight	0.301 mg/kg
sodium 2-ethylhexanoate	marine water sediment	dry weight	0.0301 mg/kg
sodium 2-ethylhexanoate	soil	dry weight	0.0579 mg/kg
sodium 2-ethylhexanoate	water treatment plant	/	71.7 mg/L

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

No information.

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

liquid

Colour

according to specification

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. 8.25 at 20 °C
Viscosity	No information.
Solubility	Water: miscible
Partition coefficient	No information.
Vapour pressure	No information.
Density and/or relative density	Density: ca. 1.005 g/cm ³ at 20 °C
Relative vapour density	No information.
Particle characteristics	No information.

9.2 OTHER INFORMATION

Explosive properties	No information.
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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 special precautions required. Consider the directions for use and storage.

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
sodium 2-ethylhexanoate	oral	LD ₅₀	rat	/	2043 mg/kg bw	OECD 401	/
sodium 2-ethylhexanoate	dermal	LD ₅₀	rat	/	> 2000 mg/kg bw	OECD 402	/
sodium 2-ethylhexanoate	inhalation (vapours)	LC ₀	rat	8 h	0.11 mg/l	OECD 403	/

(b) Skin corrosion/irritation

No information.

(c) Serious eye damage/irritation

No information.

(d) Respiratory or skin sensitisation

No information.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

For components

Name	Reproductive toxicity type	Type	Species	Time	value	result	Method	Remark
sodium 2-ethylhexanoate	Teratogenicity	oral	rat	/	/	Increased incidence of malformations, delayed fetal growth, lower birth rates.	/	(2-EXA)
sodium 2-ethylhexanoate	Teratogenicity	/	mouse	/	/	birth malformations	/	Intraperitoneal

Summary of evaluation of the CMR properties

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

(h) STOT-single exposure

No information.

(i) STOT-repeated exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
sodium 2-ethylhexanoate	oral	-	rat	/	/	/	/	2-Ethylhexanoic acid (2-EXA) caused an increase in liver size and enzyme levels when repeatedly administered to rats via the diet.	/	/

(j) Aspiration hazard

No information.

Symptoms related to the physical, chemical and toxicological characteristics

No information.

Interactive effects

No information.

11.2 Information on other hazards**Endocrine disrupting properties**

No information.

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
sodium 2-ethylhexanoate	LC ₅₀	> 100 mg/L	96 h	fish	<i>Oryzias latipes</i>	OECD 203	/

Chronic (long-term) toxicity

No information.

12.2 Persistence and degradability**Abiotic degradation, physical- and photo-chemical elimination**

No information.

Biodegradation

No information.

12.3 Bioaccumulative potential**Partition coefficient**

No information.

Bioconcentration factor (BCF)

No information.

12.4 Mobility in soil**Known or predicted distribution to environmental compartments**

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

12.5 Results of PBT and vPvB assessment

No evaluation.

12.6 Endocrine disrupting properties

No information.

12.7 Other adverse effects

No information.

12.8 Additional information**For product**

Product is not classified as dangerous for environment.

For components**sodium 2-ethylhexanoate**

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

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product / Packaging disposal****Waste chemical**

Dispose according to regulations.

Waste codes / waste designations according to LoW

20 01 99 - other fractions not otherwise specified

Packaging

Emptied container is suitable for recycling.

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

2.1 Classification of the substance or mixture 2.3 Other hazards 3.2 Mixtures 4.1 Description of first aid measures 8.1 Control parameters 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 12.1 Toxicity 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

Safety Data Sheet of raw material.

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.
H361d Suspected of damaging the unborn child.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.