Safety Data Sheet

KRAMP COOLANT K11 -25°C

Replaces date: 03/03/2023

Revision date: 09/05/2023
Version: 3.1.0

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

1.1. Product identifier

Trade name: KRAMP COOLANT K11 -25°C

Unique Formula Identifier (UFI): UFI: 2F00-Q07E-Q00T-4DQG

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

Recommended uses: Anti-freezing agents.

1.3. Details of the supplier of the safety data sheet

Supplier

Company:	Kramp UK Ltd
Address:	Unit 5 Lancaster Way
Zip code:	SG18 8YL
City:	Biggleswade
Country:	UNITED KINGDOM
E-mail:	sales.uk@kramp.com
Phone:	+44(0)1767 602 600

1.4. Emergency Telephone Number

Members of the public: 111 (NHS 111 (Scotland: NHS 24)).

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Acute Tox. 4;H302
Eye Irrit. 2;H319
STOT RE 2;H373 (Kidneys.) (Oral.)

Most serious harmful effects: Harmful if swallowed. Causes serious eye irritation. May cause damage to organs through prolonged or repeated exposure. (Kidneys.) (Oral.) The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Can be absorbed through the skin causing symptoms such as dizziness and headache. The product contains a substance which is a suspected reproductive hazard.

2.2. Label elements

Pictograms

Signal word: Warning

Contains

Substance: ethanediol;

Hazard Statements

H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure. (Kidneys.) (Oral.)

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear eye protection/face protection.
P301+312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P314	Get medical advice/attention if you feel unwell.
P337+313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local regulation.

2.3. Other hazards

The product does not contain any PBT or vPvB substances.
Endocrine disrupting properties: None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No./ EC No./ REACH Reg. No.	Concentration	Notes	CLP-classification
ethanediol	107-21-1 203-473-3 01-2119456816-28	25 - 50 %		Acute Tox. 4;H302 STOT RE 2;H373 LC50 (vapour) (Acute toxicity - inhalation): > 2.5 mg/l
potassium 2-ethylhexanoate	3164-85-0 221-625-7 01-2119980714-29	1 -< 2.5 %		Skin Irrit. 2;H315 Eye Dam. 1;H318 Repr. 2;H361d

Please see section 16 for the full text of H- / EUH-phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Seek fresh air. Seek medical advice in case of persistent discomfort.

Ingestion: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Seek medical advice in case of discomfort.

Skin contact:	Remove contaminated clothing. Wash the skin with water. Seek medical advice in case of persistent discomfort.
Eye contact:	Flush immediately with water (preferably using eye wash equipment) for at least 5 minutes. Open eye wide. Remove any contact lenses. Seek medical advice.
General:	When obtaining medical advice, show the safety data sheet or label.

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

Harmful if swallowed. Irritating to eyes. Causes a burning sensation and tearing. May cause damage to organs through prolonged or repeated exposure. The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Can be absorbed through the skin causing symptoms such as dizziness and headache. The product contains at least one substance which is a suspected reproductive hazard.

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

Treat symptoms. No special immediate treatment required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:	Extinguish with powder, foam or water mist. Use water or water mist to cool non-ignited stock.
Unsuitable extinguishing media:	Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

The product decomposes when combusted and the following toxic gases can be formed: Carbon monoxide and carbon dioxide.

5.3. Advice for firefighters

Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases - seek fresh air.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Stay upwind/keep distance from source. Stop leak if this can be done without risk. Wear gloves. Wear respiratory protective equipment. Wear safety goggles.
For emergency responders:	In addition to the above: Protective suit equivalent to EN 368, type 3, is recommended.

6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers. Wipe up minor spills with a cloth.

6.4. Reference to other sections

See section 8 for type of protective equipment.
See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Provide good ventilation. Running water and eye wash equipment must be available. Wash hands before breaks, before using restroom facilities, and at the end of work. A workplace assessment must be conducted to ensure that employees are not exposed to effects that may involve a risk during pregnancy or when breastfeeding.

7.2. Conditions for safe storage, including any incompatibilities

Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc. Keep in tightly closed original packaging. Do not store with the following: Acids/ Oxidisers.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limit

Substance name	Time period	ppm	mg/m³	fiber/cm3	Remarks	Comments
ethanediol	8h		10		Particulate	Sk
ethanediol	8h	20	52		vapour	Sk
ethanediol	15m				Particulate	Sk
ethanediol	15m	40	104		vapour	Sk

Sk = Can be absorbed through the skin.

Measuring methods: Compliance with the stated occupational exposure limits may be checked by occupational hygiene measurements.

Legal basis: EH40/2005 Workplace exposure limits. Last amended January 2020.

PNEC

ethanediol, cas-no 107-21-1				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC aqua (freshwater)	10 mg/l			
PNEC aqua (marine water)	1 mg/l			
PNEC aqua (intermittent releases)	10 mg/l			
PNEC STP (wastewater-treatment facilities)	199,5 mg/l			
PNEC soil	1,53 mg/kg dw			
PNEC sediment (freshwater)	20.9 mg/kg dw			

potassium 2-ethylhexanoate, cas-no 3164-85-0				
Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC aqua (freshwater)	0,36 mg/l			
PNEC aqua (intermittent releases)	0,493 mg/l			
PNEC STP (wastewater-treatment facilities)	71,7 mg/l			

PNEC sediment (freshwater)	6,37 mg/kg dw			
PNEC sediment (marine water)	0,637 mg/kg dw			
PNEC soil	1,06 mg/kg dw			

DNEL - workers

ethanediol, cas-no 107-21-1

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	106 mg/kg bw/day				
Inhalation DNEL (acute/short-term exposure - local effects)	35 mg/m³				

potassium 2-ethylhexanoate, cas-no 3164-85-0

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	5.95 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	41.98 mg/m³				

DNEL - general population

ethanediol, cas-no 107-21-1

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Dermal DNEL (long-term exposure - systemic effects)	53 mg/kg bw/day				
Inhalation DNEL (acute/short-term exposure - local effects)	7 mg/m³				

potassium 2-ethylhexanoate, cas-no 3164-85-0

Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Oral DNEL (long-term exposure - systemic effects)	2,98 mg/kg bw/day				
Dermal DNEL (long-term exposure - systemic effects)	2.98 mg/kg bw/day				
Inhalation DNEL (long-term exposure - systemic effects)	10.35 mg/m³				

8.2. Exposure controls

Appropriate engineering controls: Wear the personal protective equipment specified below. Use the product under well-ventilated conditions.

Personal protective equipment, eye/face protection: Wear safety goggles. Eye protection must conform to EN 166.

Personal protective equipment, hand protection:	Wear gloves. Type of material and thickness: Nitrile rubber/ >= 0,4 mm. Penetration time: >8 hours. Gloves must conform to EN 374. The suitability and durability of a glove is dependant on usage, e.g. frequency and duration of contact, glove material thickness, functionality and chemical resistance. Always seek advice from the glove supplier.
Personal protective equipment, respiratory protection:	Use process ventilation. If this is not possible, use respiratory equipment. Filter type: A / P2 Respiratory protection must conform to one of the following standards: EN 136/140/145.
Environmental exposure controls:	Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Liquid
Colour	Blue
Odour	Characteristic
Solubility	Solubility in water: Completely miscible

Parameter	Value/unit	Remarks
Odour threshold	No data	
Melting point	No data	
Freezing point	No data	
Initial boiling point and boiling range	No data	
Flammability (solid, gas)	No data	
Flammability limits	~ 398 °C	
Explosion limits	No data	
Flash Point	No data	
Auto-ignition temperature	No data	
Decomposition temperature	No data	
pH (solution for use)	8.4	20 °C.
pH (concentrate)	No data	
Kinematic viscosity	No data	
Viscosity	No data	
Partition coefficient n-octonol/water	No data	
Vapour pressure	No data	
Density	1.1 g/cm³	
Relative density	No data	
Vapour density	No data	
Relative density (sat. air)	No data	
Particle characteristics	No data	

9.2. Other information

Other Information: VOC (Volatile organic compounds): 0 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Reacts with the following: Acids/ Oxidisers.

10.2. Chemical stability

The product is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

Product vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Acids/ Oxidisers.

10.6. Hazardous decomposition products

The product decomposes when combusted or heated to high temperatures and the following toxic gases can be formed: Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity - oral

ethanediol, cas-no 107-21-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		7712 mg/kg			

potassium 2-ethylhexanoate, cas-no 3164-85-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		3640 mg/kg		OECD 401	

Harmful if swallowed.

Acute toxicity - dermal

ethanediol, cas-no 107-21-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Mouse	LD50		> 3500 mg/kg			

potassium 2-ethylhexanoate, cas-no 3164-85-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000 mg/kg		OECD 402	

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - inhalation

ethanediol, cas-no 107-21-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LC50 (vapour)	6 h	> 2.5 mg/l			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

Skin corrosion/irritation: May cause slight irritation. The product does not have to be classified. Test data are not available.

Serious eye damage/eye irritation: Irritating to eyes. Causes a burning sensation and tearing.

Respiratory sensitisation or The product does not have to be classified. Test data are not available.

skin sensitisation:

Germ cell mutagenicity: The product does not have to be classified. Test data are not available.

Carcinogenic properties: The product does not have to be classified. Test data are not available.

Reproductive toxicity: The product contains at least one substance which is a suspected reproductive hazard. The product does not have to be classified. Test data are not available.

Single STOT exposure: The product releases organic solvent vapours which may cause lethargy and dizziness. At high concentrations, the vapours may cause headache and intoxication. Can be absorbed through the skin causing symptoms such as dizziness and headache. The product does not have to be classified. Test data are not available.

Repeated STOT exposure: May cause damage to organs through prolonged or repeated exposure. The following organs will be damaged: Kidneys. Exposure route: Oral.

Aspiration hazard: The product does not have to be classified. Test data are not available.

11.2. Information on other hazards

Endocrine disrupting properties: None known.

Other toxicological effects

ethanediol, cas-no 107-21-1

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	NOAEL(oral)	90d	150 mg/kg bw/day		OECD 408	

potassium 2-ethylhexanoate, cas-no 3164-85-0

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Mouse	NOAEL(oral)	90d	180 mg/kg bw/day			

SECTION 12: Ecological information

12.1. Toxicity

ethanediol, cas-no 107-21-1

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Algae	Pseudokirchneriella subcapitata		96hEC50	6500 - 13000 mg/l		EPA 600/9-78-018	
Crustacea	Daphnia magna		48hEC50	> 100 mg/l		OECD 202	
Fish	Pimephales promelas		96hLC50	72860 mg/l			
Bacteria	Pseudomonas putida		16hEC50	> 10000 mg/l		DIN 38412/8	

potassium 2-ethylhexanoate, cas-no 3164-85-0

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Crustacea	Daphnia magna		48hEC50	85.4 mg/l			
Algae	Desmodesmus subspicatus		72hIC50	49.3 mg/l			
Fish			LC50	> 100 mg/l			

The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.

12.2. Persistence and degradability

Expected to be biodegradable.

12.3. Bioaccumulative potential

No bioaccumulation expected. Test data are not available.

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Avoid discharge to drain or surface water.
If this product as supplied becomes a waste, it meets the criteria of a hazardous waste (Dir. 2008/98/EU). Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.
Uncleansed packaging is to be disposed of via the local waste-removal scheme. Empty, cleansed packaging should be disposed of for recycling.

Category of waste:

EWC code: Depends on line of business and use, for instance 16 01 14* antifreeze fluids containing hazardous substances

Absorbent/cloth contaminated with the product: EWC code:
15 02 02* absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by hazardous substances

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	Not applicable.	**14.4. Packing group:**	Not applicable.
14.2. UN proper shipping name:	Not applicable.	**14.5. Environmental hazards:**	Not applicable.
14.3. Transport hazard class(es):	Not applicable.		

Inland water ways transport (ADN)

14.1. UN number or ID number:	Not applicable.	**14.4. Packing group:**	Not applicable.
14.2. UN proper shipping name:	Not applicable.	**14.5. Environmental hazards:**	Not applicable.
14.3. Transport hazard class(es):	Not applicable.		

Sea transport (IMDG)

14.1. UN number or ID number:	Not applicable.	**14.4. Packing group:**	Not applicable.
14.2. UN proper shipping name:	Not applicable.	**14.5. Environmental hazards:**	Not applicable.
14.3. Transport hazard class(es):	Not applicable.		

Air transport (ICAO-TI / IATA-DGR)

14.1. UN number or ID number:	Not applicable.	**14.4. Packing group:**	Not applicable.
14.2. UN proper shipping name:	Not applicable.	**14.5. Environmental hazards:**	Not applicable.
14.3. Transport hazard class(es):	Not applicable.		

14.6. Special precautions for user

None.

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

Special Provisions: Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.

Covered by:
Council Directive (EC) on the protection of young people at work.
Council Directive (EC) on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

15.2. Chemical Safety Assessment

REACH Reg. No.	Substance name
01-2119456816-28	ethanediol
01-2119980714-29	potassium 2-ethylhexanoate

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
3.1.0	09/05/2023	Bureau Veritas HSE / SJU	1,3,8,9,11,12,16

Abbreviations:
vPvB: Very Persistent and Very Bioaccumulative
PBT: Persistent, Bioaccumulative and Toxic
STOT: Specific Target Organ Toxicity
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration

Other Information: This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with Regulation 1907/2006/EC “The Registration, Evaluation and Authorization of Chemicals” as amended by the stationary UK REACH etc. (EU Exit) as subsequently changed.

Training advice: A thorough knowledge of this safety data sheet should be a prerequisite condition.

Classification method: Calculation based on the hazards of the known components.

List of relevant H-statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure. (Kidneys.) (Oral.)
H373	May cause damage to organs through prolonged or repeated exposure.

SDS is prepared by

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