

MATERIAL SAFETY DATA SHEET

Revision date: 20.01.2020
Version: 03



1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name	KANSLER, ANTIFREEZE GII, -36°C
Product use	Liquid for car cooling circuit
Company	BLW Handel GmbH
Address	Wachtelstr. 13 12526 Berlin, Deutschland
Phone	+49 30 818 78 777
E-mail address	info@kansler.de
Emergency telephone number	112

2. HAZARDS IDENTIFICATION

Classification of a mixture	The mixture is hazardous according to Regulation (EC) No. 1272/2008.
Physical hazards	Liquid for car cooling circuit.
Health hazards	Acute toxicity (oral), Category 4; H302. STOT RE 2; H373.
Environmental hazards	Not Classified.
Label elements	Labelling according to Regulation (EC) No. 1272/2008 [CLP].
Hazard pictograms	
Signal words	Warning.
Hazardous ingredients	Ethanediol.
Hazard statements	H302 Harmful if swallowed. H373 May cause damage to the kidneys through prolonged or repeated exposure.
Precautionary Statements	P102 Keep out of reach of children. P260 Do not breathe dust/fume/gas/mist/vapours/spray. P270 Do not eat, drink or smoke when using this product. P264 Wash thoroughly after handling. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. P330 Rinse mouth. P302+P350 IF ON SKIN: Gently wash with plenty of soap and water. P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P405 Store locked up.
P501 Dispose of contents/container in accordance with local/ regional/ national/ international regulations.

Other hazards No additional information available.

3. COMPOSITION/INFORMATION ON INGREDIENT

Mixture:

Name	W (%)	CAS Nr. EC Nr.	Classification
Ethanediol	40	107-21-1 203-473-3	Acute Tox. 4; H302 STOT RE 2; H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

Description of first aid measures:

After ingestion	If swallowed, get immediate medical attention. Do not induce vomiting.
After inhalation	Move a person to fresh air if necessary.
In case of skin contact	Wash the skin with soap and water. Remove contaminated clothing as soon as possible. Seek medical advice if symptoms persist
In case of eye contact	Flush immediately with water for at least 15 minutes. Get medical advice if discomfort continues. Continue to flush during transport to physician.
Most important symptoms and effects, both acute and delayed:	
Symptoms/injuries after inhalation	Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
Symptoms/injuries after skin contact	Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/injuries after eye contact	Not expected to present a significant eye contact hazard under anticipated conditions of normal use.
Symptoms/injuries after ingestion	Harmful if swallowed.
Indication of any immediate medical attention and special treatment needed:	
First aid kits:	Clean, warm water, soap, drinking water.

5. FIREFIGHTING MEASURE

Suitable extinguishing media Carbon dioxide (CO₂), dry chemical powder, foam. Water fog. Apply aqueous extinguishing media carefully to prevent frothing/steam explosion.

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Special hazards arising from the substance or mixture

No additional information available.

Advice for firefighter

Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection.

6. ACCIDENTAL RELEASE MEASURE

Personal precautions, protective equipment and emergency procedures

Stop leak if safe to do so. Evacuate personnel to a safe area. Avoid any direct contact with the product. Avoid contact with skin, eye and clothing. Avoid breathing dust. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Spilled material may present a slipping hazard. Prevent entry to sewers and public waters. Wear suitable protective clothing and eye/face protection.

Environmental precaution

Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material.

Methods and material for containment and cleaning up

Wear suitable protective clothing. Stop leak if safe to do so. Spilled material may present a slipping hazard. Small spills: Clean up any spills as soon as possible, using an absorbent material to collect it. Contain large spills to maximize product recovery or disposal. Substance floats in water. Specialist clean-up methods may be required. Comply with applicable regulations.

Reference to other section

Refer to sections 1 (contact and emergency phone number), 8 and 13.

7. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURE

Precautions for safe handling:

Avoid all unnecessary exposure. Both local exhaust and general room ventilation are usually required. Remove ignition sources. No open flames. No smoking. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities:

Technical measures: Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to flames, sparks, heat, or other potential ignition sources.

Storage condition(s): Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep container tightly closed. Do not store near oxidizing agents.

Recommended Materials:

For containers or container linings, use mild steel or high density polyethylene.

Specific end use:

No additional information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Antifreeze concentrate:

TWA(8 Hrs): 52 mg/m³

TWA(8 Hrs): 20 mg/m³

Ethanediol:

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DNEL
Workers - Dermal; Long term systemic effects: 106 mg/kg/day
Workers - Inhalation; Long term systemic effects: 35 mg/m³
Consumer - Dermal; Long term systemic effects: 53 mg/kg/day
Consumer - Inhalation; Long term systemic effects: 7 mg/m³

PNEC
Water, Fresh water; 10 mg/l
Water, Marine water; 1 mg/l
STP; 199,5 mg/l
Sediment (Freshwater); 37 mg/kg/sediment dw
Sediment (Marinewater); 3,7 mg/kg/sediment dw
Soil; 1,53 mg/kg

Personal protective equipment:
Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Permeation time: minimum >480min long term exposure; material / thickness [mm]: >0,35 mm. Butyl rubber (IIR) / Polyvinylchloride (PVC)

Skin and body protection

No special clothing/skin protection equipment is recommended under normal conditions of use.

Eyes protection

Safety glasses. Standard EN 166 - Personal eye-protection.

Hygiene measure

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes. Wash hands thoroughly after handling. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. DO NOT use gasoline, kerosene, solvents, or harsh abrasives as skin cleansers. Remove all contaminated clothing and footwear. Wash contaminated clothing prior to re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Odor	Characteristic
Odor Threshold	Not established
pH	8
Melting Point / Freezing Point	≤ -36 °C
Initial Boiling Point and Boiling Range	≥107,5 °C
Flash point	Not applicable
Flammability	Not applicable
Upper/Lower Flammability or Explosive Limits	3,2 - 15,3 % vol. (for ethylene glycol)
Vapor Pressure@ 20 °C	0.123 hPa at 25°C
Vapor Density	against air – 2.14
Relative Density@ 15 °C	1.13 (water = 1)
Solubility in Water	Glycol is unlimitedly soluble in water; soluble in most of organic solvents (alcohol, acetone, ether).

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Insoluble in aliphatic hydrocarbons (hexane, extraction naphtha) and carbon tetrachloride.

Partition Coefficient: n-Octanol/Water	log Pow -1,36 (for ethylene glycol)
Auto-ignition Temperature	398°C
Decomposition Temperature	Not established
Viscosity	Not established

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reaction	No information available.
Conditions to avoid	No additional information available.
Incompatible materials	No additional information available.
Hazardous decomposition product	None under normal conditions.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects: Acute toxicity	Oral: Harmful if swallowed.
Ethanedial	LD50 oral ATE: 16667 mg/kg OECD 401 LD50 oral rat: 5840 mg/kg OECD 401 LD50 dermal rabbit: 9530 mg/kg OECD 402
Skin Irritation	Not classified.
Eye Irritation	Expected to be slightly irritating.
Sensitization	Not expected to be a skin sensitizer.
Repeated dose toxicity	No data available.
Carcinogenicity	Not classified.
Mutagenicity	Not expected to be mutagenic.
Toxicity for reproduction	Not expected to be toxic.

Information on likely routes of exposure:

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After inhalation	Inhalation of vapors may cause respiratory irritation.
After contact with skin	Prolonged or repeated skin contact with the material will remove natural oils and could lead to dermatitis.
After contact with eyes	Flush immediately with water for at least 15 minutes. Get medical advice if discomfort continues. Continue to flush during transport to physician.
After ingestion	Ingestion may cause nausea, vomiting and diarrhea.
Delayed and immediate effects as well as chronic effects from short and long-term exposure	No adverse health effects were noted.
Other information	No data available.

12. ECOLOGICAL INFORMATION

Toxicity Ethanediol	LC50 fish l: 72860 mg/l @96h - <i>Pimephales promelas</i> . EC50 Daphnia l: 100 mg/l @48h - <i>Daphnia magna</i> . EC50 other aquatic organisms l: 13000 mg/l @72h - <i>Selenastrum capricornutum</i> .
Persistence and degradability	The environment is biochemically decomposed, 90-100%, 10days; OECD 301A.
Bioaccumulative potential	Bioconcentration factor (BCF REACH): 0.60
Mobility in soil	Surface tension: 49890 N/m @25°C.
Results of PBT and vPvB assessment	No additional information available.
Other adverse effects	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities. Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.

13. DISPOSAL CONSIDERATIONS

Material Disposal	Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses.
Container Disposal	Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand.
Local Legislation	Disposal should be in accordance with applicable regional, national, and local laws and regulations.

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14. TRANSPORT INFORMATION

The substance is not a subject to transport regulations on hazardous goods included in ADR (road transport), RID (rail transport), IMDG (marine transport) and ICAO/IATA (air transport).

UN number	Not applicable.
UN proper shipping name	Not applicable.
Transport hazard class(es)	Not applicable.
Packing group	Not applicable.
Environmental hazards	Not applicable.
Special precautions for use	Not applicable.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:
This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment:

No chemical safety assessment has been carried out for the substance or the mixture by the supplier.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. 4 (Oral) - Acute toxicity (oral), 4 cat.

H302 Harmful if swallowed.

H373 May cause damage to organs through prolonged or repeated exposure if swallowed.

Key or legend to abbreviations and acronyms used in the safety data sheet:

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

DNEL : Derived No Effect Level

EINECS : European Inventory of Existing Commercial Chemical Substances (EINECS)

EN : European Standard

ES : Exposure Scenario

EU : European Union

IATA : International Air Transport Association

LC50 : Lethal Concentration to 50 % of a test population

LD50 : Lethal Dose to 50% of a test population (Median Lethal Dose)

NDSL : Non-Domestic Substances List (NDSL)

DEL : Occupational Exposure Limit

PEC : Predicted Effect Concentration

PNEC : Predicted No Effect Concentration

PPE : Personal Protection Equipment

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

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TWA : time weighted average

Other information:

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