

SAFETY DATA SHEET

US OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada WHMIS 2015 which includes the amended Hazardous Products Act (HPA) and the Hazardous Products Regulation (HPR)

Extended Life Coolant

Issuing Date 24-Mar-2022 Revision Date 24-Mar-2022 Revision Number 1

1. Identification

Product identifier

Product Name Extended Life Coolant

Other means of identification

Product Code(s) GM109949, GM109950, GM109951, GM109952, GM109953, 5300200007

UN/ID no UN3082

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Coolant

Restrictions on useAvoid formation of mists

Details of the supplier of the safety data sheet

Initial supplier identifier Manufacturer Address

Kohler Canada Co.. Kohler Co. .

106-8800 Dufferin Street Vaughan, Ontario CANADA L4K 0C5 444 Highland Drive Kohler, WI 53044 T: +800-456-4537

T:905-762-6599

Emergency telephone number

Emergency telephone CHEMTREC: Within USA and Canada: 1-800-424-9300

Outside the USA and Canada: +1 703-741-5970

(collect calls accepted) 24/7

2. Hazard(s) identification

Classification

Acute toxicity - Oral	Category 4
Specific target organ toxicity (repeated exposure)	Category 2

Label elements

Warning

Hazard statements

Harmful if swallowed.

May cause damage to organs through prolonged or repeated exposure.



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust, fume, gas, mist, vapors and spray.

Precautionary Statements - Response

Get medical advice/attention if you feel unwell.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

Precautionary Statements - Disposal

Dispose of contents and container to an approved waste disposal plant.

Other information

No information available.

Unknown acute toxicity

60 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

3. Composition/information on ingredients

Substance

Not applicable.

<u>Mixture</u>

Chemical name	CAS No	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	
Ethane-1,2-diol	107-21-1	40-60	-	-

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER

or doctor if you feel unwell.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and

persists.

Skin contact Wash off with warm water and soap. Call a POISON CENTER or doctor/physician if you

feel unwell.

Ingestion Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious

person. Call a physician.

Self-protection of the first aider Wear personal protective clothing (see section 8). Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms May cause gastrointestinal discomfort if consumed in large amounts. Stomach pain.

Nausea. Vomiting. May cause temporary eye irritation. Prolonged contact may cause

redness and irritation.

Indication of any immediate medical attention and special treatment needed

5. Fire-fighting measures

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Use extinguishing

measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing mediaDo not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the

chemical

Containers can burst or explode when heated, due to excessive pressure build-up. Thermal

decomposition can lead to release of irritating gases and vapors.

Hazardous combustion products Carbon monoxide, Carbon dioxide (CO2).

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Do not handle until all safety precautions have been read and understood. Ensure

adequate ventilation. Use personal protective equipment as required. Evacuate personnel

to safe areas.

Other information Refer to protective measures listed in Sections 7 and 8.

For emergency responders Use personal protection recommended in Section 8.

Methods and material for containment and cleaning up

Methods for containment Prevent materials or runoff from entering drains, sewers, streams, ground water or bodies

of water.

Methods for cleaning up Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13). Clean contaminated surface thoroughly. After

cleaning, flush away traces with water.

Reference to other sections For additional information see: Section 8: Exposure controls/personal protection;

Section 12: Ecological information; Section 13: Disposal considerations.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Do not handle until all safety precautions have been read and understood. Avoid contact

with used product. Handle in accordance with good industrial hygiene and safety practice.

Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Do not reuse empty containers. Keep container upright. Store away from incompatible

materials. See section 10 for more information. Keep containers tightly closed in a dry, cool

and well-ventilated place. Keep out of the reach of children.

8. Exposure controls/personal protection

Control parameters

Exposure Limits

Chemical name	ACGIH TLV		OSH	A PEL		NIOSH
Ethane-1,2-diol 107-21-1	STEL: 50 ppm vapor STEL: 10 mg/m³ inh particulate matter, aero TWA: 25 ppm vapor	alable osol only		eiling: 50 ppm ling: 125 mg/m³		-
Chemical name	Alberta	Britis	h Columbia	Ontario		Quebec
Ethane-1,2-diol 107-21-1	Ceiling: 100 mg/m ³	STEI Ceiling	A: 10 mg/m ³ L: 20 mg/m ³ g: 100 mg/m ³ ng: 50 ppm	TWA: 25 pp STEL: 50 p STEL: 10 mg	pm	Ceiling: 50 ppm Ceiling: 127 mg/m³

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection If there is a risk of contact:. Wear safety glasses with side shields (or goggles).

Hand protection If there is a risk of contact: Chemical resistant gloves. Ensure that the breakthrough time of

the glove material is not exceeded. Refer to glove supplier for information on breakthrough

time for specific gloves.

Skin and body protection If there is a risk of contact: Wear chemical protective suit and boots to prevent skin

exposure.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls Avoid release to the environment. Keep container closed when not in use. Local authorities

should be advised if significant spillages cannot be contained.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or

smoke when using this product. Wash hands before breaks and immediately after handling

the product.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state Liquid Color blue

Odor Odorless

Odor threshold No information available

Property Values Remarks • Method 7.6 - 9 -38.3 °C / -37 °F No data available Hq Melting point / freezing point **ASTM D3321** Initial boiling point and boiling No data available

range

Flash point No data available **Evaporation rate** No data available **Flammability** No data available

Flammability Limit in Air

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

No data available Vapor pressure Vapor density No data available Relative density 1.0650 - 1.0850 No data available Water solubility No data available Solubility(ies) No data available Partition coefficient No data available **Autoignition temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available **Dynamic viscosity** No data available

Other information

Explosive properties No information available. **Oxidizing properties** No information available. Softening point No information available Molecular weight No information available VOC Content (%) No information available No information available **Liquid Density Bulk density** No information available

10. Stability and reactivity

Reactivity None under normal use conditions.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Incompatible materials.

Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products Thermal decomposition can lead to release of irritating and toxic gases and vapors: Carbon

monoxide, Carbon dioxide (CO2).

11. Toxicological information

Information on likely routes of exposure

Product Information

Inhalation Cough, Difficulty in breathing, Chest pain.

Eye contact Tearing.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available. Harmful if swallowed. (based

on components).

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Acute toxicity

Numerical measures of toxicity

No information available

The following values are calculated based on chapter 3.1 of the GHS document:

ATEmix (oral) 500.00 mg/kg
ATEmix (dermal) 10,600.00 mg/kg
ATEmix (inhalation-dust/mist) 3.7538 mg/l

Unknown acute toxicity

60 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Ethane-1,2-diol	= 4700 mg/kg (Rat)	= 10600 mg/kg(Rat)	> 2.5 mg/L (Rat)6 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity The supplier declares that it can be shown that the substance(s) contain less than 3%

DMSO extract as measured by IP 346.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Ethane-1,2-diol 107-21-1	Not listed	A4	Not listed	Not listed

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure.

Target organ effects Respiratory system. Eyes. Skin. Central nervous system.

Aspiration hazardDue to the viscosity, this product does not present an aspiration hazard.

12. Ecological information

Ecotoxicity Large or frequent spills may have hazardous effects on the environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Ethane-1,2-diol 107-21-1	EC50: 6500 - 13000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =41000mg/L (96h, Oncorhynchus mykiss) LC50: 14 - 18mL/L (96h, Oncorhynchus mykiss) LC50: =27540mg/L (96h, Lepomis macrochirus) LC50: =40761mg/L (96h, Oncorhynchus mykiss) LC50: 40000 - 60000mg/L (96h, Pimephales promelas) LC50: =16000mg/L (96h, Poecilia reticulata)	-	EC50: =46300mg/L (48h, Daphnia magna)

Persistence and degradability

No information available.

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Ethane-1,2-diol	-1.36
107-21-1	

Mobility in soil

Other adverse effects

No information available.

No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations, Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. Transport information

DOT

UN3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es) 9
Packing group 9

Reportable Quantity (RQ)

(Ethane-1,2-diol: RQ (kg)= 2270.00) Ethane-1,2-diol: RQ (lb)= 5000.00

Reportable quantity kg Ethane-1,2-diol: RQ (kg)= 5675.00

(calculated)

Reportable quantity lbs. Ethane-1,2-diol: RQ (lb)= 12500.00

(calculated)

Special Provisions 8, 146, 173, 335, IB3, T4, TP1, TP29

DOT Marine Pollutant

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Ethane-1,2-diol), 9, III, Marine pollutant

Emergency Response Guide 171

Number

TDG

UN/ID no UN3082

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Hazard class 9
Packing group III
Special Provisions 16, 99

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Ethane-1,2-diol), 9, III

IATA

UN number or ID number UN3082

UN proper shipping name Environmentally hazardous substance, liquid, n.o.s.

Transport hazard class(es) 9
Packing group III
ERG Code 9L

Special Provisions A97, A158, A197

Description UN3082, Environmentally hazardous substance, liquid, n.o.s. (Ethane-1,2-diol), 9, III

IMDG

UN number or ID number UN3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Transport hazard class(es) 9
Packing group ||||

EmS-No F-A, S-F Special Provisions 274, 335, 969

Marine pollutant

Description UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(Ethane-1,2-diol), 9, III, Marine pollutant

15. Regulatory information

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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

Contact supplier for inventory compliance status

	1		
Chemical name	CAS No	US TSCA Inventory listing	US TSCA inactive/active
			designation
Ethane-1,2-diol	107-21-1	Present	Active

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical name	SARA 313 - Threshold Values %
Ethane-1,2-diol - 107-21-1	1.0

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate

classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Ethane-1,2-diol 107-21-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
Ethane-1,2-diol - 107-21-1	Developmental

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Ethane-1,2-diol	X	X	X
107-21-1			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Key literature references and sources for data used to compile the SDS

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organization for Economic Co-operation and Development Environment, Health, and Safety Publications

Organization for Economic Co-operation and Development High Production Volume Chemicals Program

Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Issuing Date 24-Mar-2022

Revision Date 24-Mar-2022

Revision Note Initial Release.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet