

Date of issue : 2015-09-14.

Version : 1.01

Section 1. Identification**Product identifier**

Product name : Coolant VCS Ready Mixed
Product no. : 17230768
Product type : Liquid.

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

Product use : Not available.

Supplier's details : Volvo Construction Equipment North
America, Inc.
312 Volvo Way
Shippensburg, PA 17257
United States

Telephone no. : + 1 (877) 823-1111

In case of emergency

1-800-535-5053

E-mail address : sds@volvo.com
websds.volvo.com

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : ACUTE TOXICITY (oral) - Category 4
TOXIC TO REPRODUCTION (Fertility) - Category 2
TOXIC TO REPRODUCTION (Unborn child) - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (kidneys) - Category 2

GHS label elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Harmful if swallowed.
Suspected of damaging fertility or the unborn child.
May cause damage to organs through prolonged or repeated exposure. (kidneys)

Precautionary statements

General : Not applicable.

Prevention : Obtain special instructions before use. Use personal protective equipment as required. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

Response : IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Storage : Store locked up.

Disposal : Not applicable.

Other hazards which do not result in classification : Not available.

Supplemental label elements : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

CAS number/other identifiers

Product code : 17230768

Ingredient name	%	CAS number
1,2-ethanediol	30 - 60	107-21-1
Hexanoic acid, 2-ethyl-, sodium salt	1 - 5	19766-89-3



Section 3. Composition/information on ingredients

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of first aid measures

- Inhalation** : If inhaled, remove to fresh air. Get medical attention.
- Skin contact** : After contact with skin, wash immediately with plenty of soap and water. Remove contaminated clothing and wash it before reuse. Get medical attention.
- Eye contact** : In case of contact with eyes, rinse immediately with plenty of water. Get medical attention.
- Ingestion** : Wash out mouth with water. If affected person is conscious, give plenty of water to drink. (Coolant. Contains ethylene glycol.) Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Inhalation** : This product is not likely to volatilize rapidly into the air because of its low vapor pressure.
- Skin contact** : Defatting to the skin.
- Eye contact** : May cause slight transient irritation.
- Ingestion** : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** : May cause slight transient irritation.
- Skin** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Eyes** : May cause slight transient irritation. (redness)
- Ingestion** : Exposure can cause stomach pains, vomiting and diarrhea.

Indication of immediate medical attention and special treatment needed, if necessary

- Specific treatments** : Antidote information: Ethanol
- Notes to physician** : Treat symptomatically.
- Protection of first-aiders** : Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable** : Recommended: Foam, CO₂, powders
- Not suitable** : Do not use water jet.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
metal oxide/oxides
carbon oxides
- Special precautions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Refer to protective measures listed in sections 7 and 8.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Spill** : Stop leak if without risk. Contain and collect spillage with non-combustible, absorbent material e. g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.
- Reference to other sections** : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.



Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Use only with adequate ventilation. Put on appropriate personal protective equipment (see Section 8). Wear appropriate respirator when ventilation is inadequate. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Empty containers retain product residue and can be hazardous. Do not reuse container. Do not ingest. Avoid exposure during pregnancy. Do not eat, drink or smoke when using this product.
- Advice on general occupational hygiene** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reuse.
- Conditions for safe storage, including any incompatibilities** : Do not store in unlabeled containers. Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
1,2-ethanediol	OSHA PEL 1989 (United States, 3/1989). CEIL: 50 ppm CEIL: 125 mg/m ³ Form: ACGIH TLV (United States, 4/2014). C: 100 mg/m ³ Form: Aerosol

- Appropriate engineering controls** : Use only with adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

- Environmental exposure controls** : Do not allow to enter drains or watercourses.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Personal protective equipment

- Respiratory protection** : Provide adequate ventilation.
- Hand protection** : For prolonged or repeated handling, use Chemical-resistant gloves.
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Yellow.
- Odor** : Mild.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : -34°C (-29,2°F)
- Pour point** : Not available.
- Boiling point** : 100°C (212°F)
- Flash point** : Closed cup: Not applicable.
- Burning time** : Not applicable.
- Burning rate** : Not applicable.
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Solubility** : Not available.
- Vapor density** : >1 [Air = 1]
- Density** : Not available.
- Relative density** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.

Section 9. Physical and chemical properties

Decomposition temperature : Not available.

Viscosity : Not available.

Molecular weight : Not applicable.

SADT : Not available.

Section 10. Stability and reactivity

Reactivity No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Potential acute health effects

Inhalation : This product is not likely to volatilize rapidly into the air because of its low vapor pressure.

Skin contact : Defatting to the skin.

Eye contact : May cause slight transient irritation.

Ingestion : Harmful if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : May cause slight transient irritation.

Skin : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Eyes : May cause slight transient irritation. (redness)

Ingestion : Exposure can cause stomach pains, vomiting and diarrhea.

Relevant information for the mixture and/or the ingredients is presented below.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,2-ethanediol	No applicable toxicity data	-	-	-

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Result	Species	Dose	Exposure
Hexanoic acid, 2-ethyl-, sodium salt	-	-	Positive	-	-	Oral	-

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Not applicable.				

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
1,2-ethanediol	Category 2	Oral	kidneys

General : May cause damage to organs through prolonged or repeated exposure.

Mutagenicity : Not applicable

Teratogenicity : Suspected of damaging the unborn child.

Fertility effects : Suspected of damaging fertility.

Other information : Not available.

Section 12. Ecological information

Ecotoxicity : Ecotoxicological data on the substances included in this product show that the product is not classified as harmful to the environment.

Relevant information for the mixture and/or the ingredients is presented below.

Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Not applicable.			

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Not applicable.			

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

	DOT Classification	TDG Classification	ADR/RID	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-	-
Transport hazard class(es)	-	-	-	-	-
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

Special precautions for user :

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : This product is in compliance with TSCA inventory.

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
No products were found.						

SARA 311/312

Classification :

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
1,2-ethanediol	30 - 60	No.	No.	No.	Yes.	Yes.
Hexanoic acid, 2-ethyl-, sodium salt	1 - 5	No.	No.	No.	No.	Yes.

SARA 313

Form R - Reporting requirements : 1,2-ethanediol

Supplier notification : 1,2-ethanediol

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: Applicable.



Section 15. Regulatory information

New York : The following components are listed: Applicable.
New Jersey : The following components are listed: Applicable.
Pennsylvania : The following components are listed: Applicable.

Section 16. Other information

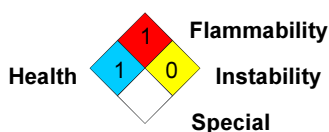
History

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Hazardous Material Information System (U.S.A.) :

National Fire Protection Association (U.S.A.) :

Health	*	1
Flammability		1
Physical hazards		0



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The customer is responsible for determining the PPE code for this material.

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Notice to reader

Conforms to US HCS (29 CFR 1910.1200).

Indicates information that has changed from previously issued version.

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.