

**1 . Product and company identification**

Trade name	: Coolant VCS Ready Mixed	<b><u>In case of emergency</u></b>
Code	: 21485014	<b>1-800-535-5053</b>
Material uses	: Industrial applications: Coolant and antifreeze.	
Supplier	: Volvo Penta of the Americas, Inc. 1300 Volvo Penta Drive Chesapeake, VA 23320	
Telephone no.	: (757) 436-2800	

**2 . Hazards identification**

Physical state : Liquid.  
Odor : Slight

Emergency overview : HARMFUL OR FATAL IF SWALLOWED.  
Keep out of reach of children. Do not taste or swallow. Wash thoroughly after handling.  
Avoid contact with skin and eyes. Do not breathe vapor or mist.

Routes of entry : Ingestion., Skin contact, Eye contact, Inhalation

**Potential acute health effects**

Inhalation	: Long-term exposure may cause headache, nausea or weakness.
Skin	: Defatting to the skin. Harmful if absorbed through the skin.
Eyes	: Slightly irritating to the eyes.
Ingestion	: Harmful if swallowed. Exposure can cause stomach pains, vomiting and diarrhea. loss of consciousness or coma.

**Potential chronic health effects**

Chronic effects	: Contains material that can cause target organ damage.
Fertility effects	: Contains material which can cause birth defects.
Medical conditions aggravated by over-exposure	: Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product. skin lesion/eczema
Over-exposure signs/symptoms	: respiratory tract irritation headache. dizziness/vertigo kidney abnormalities
Environmental effects	: Ecotoxicological data on the substances included in this product show that the product is not classified as harmful to the environment.

See toxicological information (Section 11)

**3 . Composition/information on ingredients**

<b><u>Name</u></b>	<b><u>CAS number</u></b>	<b><u>%</u></b>
1,2-ethanediol	107-21-1	30 - 60
Hexanoic acid, 2-ethyl-, sodium salt	19766-89-3	1 - 5
Bitrex, Denatonium benzoate		< 0.01

## 4 . First aid measures

Inhalation	: If inhaled, remove to fresh air. Get medical attention if symptoms occur.
Eye contact	: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.
Skin contact	: Remove contaminated clothing and shoes. Wash with soap and water. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Call medical doctor or poison control center immediately. (Coolant. Contains ethylene glycol.)
Notes to physician	: (Coolant. Contains ethylene glycol.)

## 5 . Fire-fighting measures

**Flammability of the product** : No specific fire or explosion hazard.

### Extinguishing media

<b>Suitable</b>	: Recommended: alcohol-resistant foam CO <sub>2</sub> powders .
<b>Not suitable</b>	: Do not use water jet.

**Hazardous combustion products** : Decomposition products may include the following materials: carbon oxides, metal oxide/oxides.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6 . Accidental release measures

**Personal precautions** : Refer to protective measures listed in sections 7 and 8.

**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).

**Spill** : Absorb with an inert material and transfer the spilled material and absorbent to an appropriate waste disposal container. Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## 7 . Handling and storage

**Handling** : Do not ingest. Do not breathe vapor or mist. Do not get in eyes or on skin or clothing. Wash thoroughly after handling.

**Storage** : Keep container tightly closed in a cool, well-ventilated place. Do not store in unlabeled containers.

## 8 . Exposure controls/personal protection

### Product name

1,2-ethanediol

### Exposure limits

**CA Ontario Provincial (Canada, 8/2008).**

CEV: 100 mg/m<sup>3</sup> Form:

**CA British Columbia Provincial (Canada, 7/2009).**

C: 100 mg/m<sup>3</sup> 15 minute(s). Form: Aerosol

TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: Particulate

STEL: 20 mg/m<sup>3</sup> 15 minute(s). Form: Particulate

C: 50 ppm 15 minute(s). Form: Vapour

**CA Alberta Provincial (Canada, 4/2009). Skin sensitizer.**

C: 100 mg/m<sup>3</sup> 15 minute(s). Form: aerosol

**CA Quebec Provincial (Canada, 6/2008).**

STEV: 50 ppm 15 minute(s). Form: vapour and mist

STEV: 127 mg/m<sup>3</sup> 15 minute(s). Form: vapour and mist

**Consult local authorities for acceptable exposure limits.**

**Engineering measures** : Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits.

### Personal protection

**Eyes** : Use safety eyewear designed to protect against splash of liquids.

## 8 . Exposure controls/personal protection

<b>Skin</b>	: Protective clothing
<b>Respiratory</b>	: Wear appropriate respirator when ventilation is inadequate.
<b>Hands</b>	: Chemical-resistant gloves.
<b>Hygiene measures</b>	: 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.

## 9 . Physical and chemical properties

<b>Physical state</b>	: Liquid.
<b>Color</b>	: Yellow.
<b>Odor</b>	: Slight
<b>Flash point</b>	: Closed cup: >115°C (>239°F)
<b>Boiling/condensation point</b>	: >175°C (>347°F)
<b>Relative density</b>	: 1,04
<b>Solubility</b>	: Easily soluble in the following materials: cold water and hot water.

## 10 . Stability and reactivity

<b>Stability</b>	: Stable under recommended storage and handling conditions (see section 7).
<b>Conditions to avoid</b>	: Keep away from heat and flame.
<b>Materials to avoid</b>	: Reactive or incompatible with the following materials: acids oxidizing materials
<b>Hazardous decomposition products</b>	: Decomposition products may include the following materials: carbon oxides, metal oxide/oxides.
<b>Hazardous polymerization</b>	: Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11 . Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Not applicable.				

### Carcinogenicity

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
1,2-ethanediol	A4	-	-	None.	-	-

<b>Target organs</b>	: Contains material which may cause damage to the following organs: kidneys, liver, upper respiratory tract, skin, eyes, central nervous system (CNS).
<b>Other toxic effects on humans</b>	: Harmful or fatal if swallowed. Ingestion: kidney abnormalities Contains material which can cause birth defects.

## 12 . Ecological information

<b>Environmental effects</b>	: Ecotoxicological data on the substances included in this product show that the product is not classified as harmful to the environment.
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## 13 . Disposal considerations

<b>Waste disposal</b>	: Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		
TDG Classification	Not regulated.	-	-	-		
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		

PG\* : Packing group

## 15 . Regulatory information

**WHMIS (Canada)** : Class D-1B: Material causing immediate and serious toxic effects (Toxic).  
Class D-2A: Material causing other toxic effects (Very toxic).

**Canada inventory** : This product is in compliance with DSL.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## 16 . Other information

**Emergency overview (label)** : HARMFUL OR FATAL IF SWALLOWED.  
Keep out of reach of children. Do not taste or swallow. Wash thoroughly after handling.  
Avoid contact with skin and eyes. Do not breathe vapor or mist.

**Date of issue** : 2012-02-14.

**Date of previous issue** : No previous validation.

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.