



Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
SDS ID: 31551
Issue date: 2/2/2024 Version: 1.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Volvo Penta Coolant VCS2 Ready Mixed

1.2. Recommended use and restrictions on use

No additional information available

1.3. Supplier

Volvo Penta of the Americas, Inc.
1300 Volvo Penta Drive
Chesapeake, VA, 23320
USA
T 763-545-0707

1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (CHEMTREC)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : H302 - Harmful if swallowed
H373 - May cause damage to organs through prolonged or repeated exposure
Precautionary statements (GHS US) : P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P330 - Rinse mouth.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
ETHYLENE GLYCOL	CAS-No.: 107-21-1	25 – 50	Acute Tox. 4 (Oral), H302 STOT RE 2, H373
DIETHYLENE GLYCOL	CAS-No.: 111-46-6	0.1 – 5	STOT RE 2, H373

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

No additional information available

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

No additional information available

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

No additional information available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

6.2. Environmental precautions

No additional information available

6.3. Methods and material for containment and cleaning up

No additional information available

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

No additional information available

7.2. Conditions for safe storage, including any incompatibilities

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ETHYLENE GLYCOL (107-21-1)

USA - ACGIH - Occupational Exposure Limits

Local name	Ethylene glycol
ACGIH OEL TWA	5 mg/m ³ Contains highly refined petroleum oil 25 ppm (Vapor fraction)
ACGIH OEL STEL	10 mg/m ³ (Inhalable fraction, Aerosol only) 50 ppm (Vapor fraction)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2023

USA - OSHA - Occupational Exposure Limits

OSHA PEL TWA	5 mg/m ³ Contains highly refined petroleum oil
OSHA PEL STEL	10 mg/m ³ Contains highly refined petroleum oil

8.2. Appropriate engineering controls

No additional information available

8.3. Individual protection measures/Personal protective equipment

No additional information available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Color	: orange
Odor	: mild
Odor threshold	: No data available
pH	: 8 – 9
Melting point	: No data available
Freezing point	: -23 °C
Boiling point	: 106 °C
Flash point	: 116 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: < 0.1 @20°C
Relative vapor density at 20°C	: No data available
Relative density	: 1.065
Solubility	: Miscible with water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: 400 °C
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Volvo Penta Coolant VCS2 Ready Mixed	
ATE US (oral)	1288.66 mg/kg body weight
ETHYLENE GLYCOL (107-21-1)	
LD50 dermal	> 3500 mg/kg body weight (Mouse, Male / female, Experimental value, Dermal)
LC50 Inhalation - Rat	> 2.5 mg/l (6 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
ATE US (oral)	500 mg/kg body weight
DIETHYLENE GLYCOL (111-46-6)	
LD50 dermal rabbit	11890 mg/kg (Rabbit, Dermal)
LC50 Inhalation - Rat	> 4.6 mg/l air (Other, 4 h, Rat, Weight of evidence, Inhalation (mist))
ATE US (oral)	19600 mg/kg body weight
ATE US (dermal)	11890 mg/kg body weight
Skin corrosion/irritation	: Not classified pH: 8 – 9
ETHYLENE GLYCOL (107-21-1)	
pH	6 – 7.5 Source: GESTIS
DIETHYLENE GLYCOL (111-46-6)	
pH	5 – 8 (50 %)
Serious eye damage/irritation	: Not classified pH: 8 – 9
ETHYLENE GLYCOL (107-21-1)	
pH	6 – 7.5 Source: GESTIS
DIETHYLENE GLYCOL (111-46-6)	
pH	5 – 8 (50 %)
Respiratory or skin sensitization	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
DIETHYLENE GLYCOL (111-46-6)	
NOAEL (chronic,oral,animal/male,2 years)	1210 mg/kg body weight Animal: rat, Animal sex: male
NOAEL (chronic,oral,animal/female,2 years)	1160 mg/kg body weight Animal: rat, Animal sex: female
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
ETHYLENE GLYCOL (107-21-1)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
DIETHYLENE GLYCOL (111-46-6)	
LOAEL (oral, rat, 90 days)	40000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Viscosity, kinematic : No data available

ETHYLENE GLYCOL (107-21-1)

Viscosity, kinematic 18.86 mm²/s (20 °C)

DIETHYLENE GLYCOL (111-46-6)

Viscosity, kinematic 33 mm²/s (20 °C)

SECTION 12: Ecological information

12.1. Toxicity

ETHYLENE GLYCOL (107-21-1)

LC50 - Fish [1]	40761 mg/l (96 h, Salmo gairdneri, Static system)
LC50 - Other aquatic organisms [1]	> 100 mg/l
EC50 - Crustacea [1]	> 10000 mg/l (24 h, Daphnia magna)
EC50 96h - Algae [1]	6.5 – 13 g/l (Selenastrum capricornutum, Growth)
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

DIETHYLENE GLYCOL (111-46-6)

LC50 - Fish [1]	> 5000 ppm (24 h, Carassius auratus)
EC50 - Crustacea [1]	> 10000 mg/l (24 h, Daphnia magna)
LC50 - Fish [2]	75200 mg/l (Other, 96 h, Pimephales promelas, Flow-through system, Experimental value)
EC50 - Crustacea [2]	> 10000 mg/l (DIN 38412-11, 24 h, Daphnia magna, Static system, Fresh water, Experimental value)
EC50 96h - Algae [1]	9362 mg/l (ECOSAR, Algae, QSAR)
EC50 96h - Algae [2]	9362 mg/l Test organisms (species): other:
NOEC (chronic)	≥ 1000 mg/l Test organisms (species): Americamysis bahia (previous name: Mysidopsis bahia) Duration: '23 d'

12.2. Persistence and degradability

Volvo Penta Coolant VCS2 Ready Mixed

Persistence and degradability Not rapidly degradable

ETHYLENE GLYCOL (107-21-1)

Persistence and degradability	Biodegradable in the soil, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.47 g O ₂ /g substance
Chemical oxygen demand (COD)	1.24 g O ₂ /g substance
ThOD	1.29 g O ₂ /g substance
BOD (% of ThOD)	0.36

DIETHYLENE GLYCOL (111-46-6)

Persistence and degradability Biodegradable in the soil, Biodegradable in water.

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

DIETHYLENE GLYCOL (111-46-6)

Biochemical oxygen demand (BOD)	0.02 g O ₂ /g substance
Chemical oxygen demand (COD)	1.51 g O ₂ /g substance
ThOD	1.51 g O ₂ /g substance
BOD (% of ThOD)	0.015

12.3. Bioaccumulative potential

ETHYLENE GLYCOL (107-21-1)

BCF - Fish [1]	10 (72 h, <i>Leuciscus idus</i>)
BCF - Other aquatic organisms [1]	0.21 – 0.6 (<i>Procambarus sp.</i> , Chronic)
BCF - Other aquatic organisms [2]	190 (24 h, Algae)
Partition coefficient n-octanol/water (Log Pow)	-1.34 (Experimental value)
Bioaccumulative potential	Not bioaccumulative.

DIETHYLENE GLYCOL (111-46-6)

BCF - Fish [1]	100 (Other, 3 day(s), <i>Leuciscus melanotus</i> , Static system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-1.98 (Calculated, Other)
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

ETHYLENE GLYCOL (107-21-1)

Mobility in soil	0.2 Source: HSDB
Surface tension	48 mN/m (20 °C)
Ecology - soil	No (test)data on mobility of the substance available.

DIETHYLENE GLYCOL (111-46-6)

Surface tension	0.0485 N/m
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

No additional information available

SECTION 14: Transport information

In accordance with DOT

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

14.1. UN number

DOT NA No : UN3082

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Environmentally hazardous substances, liquid, n.o.s. (Ethylene Glycol)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) : 9

Hazard labels (DOT) : 9



14.4. Packing group

Packing group (DOT) : III

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Non Bulk: Not regulated by the US D.O.T. (in quantities under 5,000 lbs in any one inner package).

DOT

UN-No.(DOT) : UN3082

DOT Packaging Exceptions (49 CFR 173.xxx) : 155

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 241

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
ETHYLENE GLYCOL	107-21-1	Present	Active	
DIETHYLENE GLYCOL	111-46-6	Present	Active	

ETHYLENE GLYCOL (107-21-1)

Subject to reporting requirements of United States SARA Section 313
Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ : 5000 lb

Volvo Penta Coolant VCS2 Ready Mixed

Safety Data Sheet

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

15.2. International regulations

CANADA

ETHYLENE GLYCOL (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

DIETHYLENE GLYCOL (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

ETHYLENE GLYCOL (107-21-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

ETHYLENE GLYCOL (107-21-1)

U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)	Maximum allowable dose level (MADL)
No	Yes	No	No		8700 µg/day (oral)

SECTION 16: Other information

According to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Full text of H-phrases

H302	Harmful if swallowed
H373	May cause damage to organs through prolonged or repeated exposure

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.