



# SAFETY DATA SHEET

## 1. Identification

<b>Product identifier</b>	<b>Salt Terminator® Engine Flush, Cleaner &amp; Corrosion Inhibitor - 946 mL</b>	
<b>Other means of identification</b>		
<b>Product Code</b>	No. 76320 (Item# 1006435)	
<b>Recommended use</b>	Engine flush and corrosion inhibitor	
<b>Recommended restrictions</b>	None known.	
<b>Manufacturer/Importer/Supplier/Distributor information</b>		
<b>Manufactured or sold by:</b>		
<b>Company name</b>	CRC Canada Co.	
<b>Address</b>	83 Galaxy Blvd Unit 35 - 37 Toronto, ON M9W 5X6 Canada	
<b>Telephone</b>		
<b>General Information</b>	416-847-7750	
<b>24-Hour Emergency (CHEMTREC)</b>	800-424-9300 (Canada)	
<b>Website</b>	www.crc-canada.ca	
<b>E-mail</b>	Support.CA@crcindustries.com	

## 2. Hazard identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

### Label elements



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes serious eye irritation. Suspected of causing cancer. Harmful to aquatic life. Harmful to aquatic life with long lasting effects.
<b>Precautionary statement</b>	
<b>Prevention</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
<b>Response</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get medical advice/attention.
<b>Storage</b>	Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Other hazards</b>	None known.
<b>Supplemental information</b>	None.

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### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
water		7732-18-5	80 - 100
sodium nitrite		7632-00-0	10 - 30
coconut diethanolamide		68603-42-9	1 - 5
sodium xylenesulphonate		1300-72-7	1 - 5
sodium laureth sulfate		9004-82-4	0.5 - 1.5
diethanolamine		111-42-2	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret.  
All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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### 4. First-aid measures

<b>Inhalation</b>	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

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### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	This product is miscible in water. Prevent product from entering drains.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid contact with eyes. Avoid prolonged exposure. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
diethanolamine (CAS 111-42-2)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction and vapor.

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
diethanolamine (CAS 111-42-2)	TWA	2 mg/m <sup>3</sup>

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
diethanolamine (CAS 111-42-2)	TWA	2 mg/m <sup>3</sup>

#### Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value	Form
diethanolamine (CAS 111-42-2)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction and vapor.

#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value	Form
diethanolamine (CAS 111-42-2)	TWA	1 mg/m <sup>3</sup>	Inhalable fraction and vapor.

#### Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value
diethanolamine (CAS 111-42-2)	TWA	13 mg/m <sup>3</sup>
		3 ppm

#### Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value
diethanolamine (CAS 111-42-2)	15 minute	4 mg/m <sup>3</sup>
	8 hour	2 mg/m <sup>3</sup>

**Biological limit values** No biological exposure limits noted for the ingredient(s).

### Exposure guidelines

#### Canada - Alberta OELs: Skin designation

diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

#### Canada - British Columbia OELs: Skin designation

diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

#### Canada - Manitoba OELs: Skin designation

diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

#### Canada - Ontario OELs: Skin designation

diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

#### Canada - Quebec OELs: Skin designation

diethanolamine (CAS 111-42-2) Can be absorbed through the skin.

**Canada - Saskatchewan OELs: Skin designation**

diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

diethanolamine (CAS 111-42-2)

Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear protective gloves such as: Nitrile. Neoprene.

**Other**

Wear suitable protective clothing.

**Respiratory protection**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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**9. Physical and chemical properties**
**Appearance****Physical state**

Liquid.

**Form**

Liquid.

**Color**

Dark blue.

**Odor**

Odorless.

**Odor threshold**

Not available.

**pH**

9.1 - 9.9

**Melting point/freezing point**

50 °F (10 °C) estimated

**Initial boiling point and boiling range**

190 °F (87.8 °C) estimated

**Flash point**

None.

**Evaporation rate**

Slow.

**Flammability (solid, gas)**

Not available.

**Upper/lower flammability or explosive limits****Flammability limit - lower (%)**

Not available.

**Flammability limit - upper (%)**

Not available.

**Vapor pressure**

1.3 hPa estimated

**Vapor density**

Not available.

**Relative density**

1.1

**Solubility(ies)****Solubility (water)**

Soluble.

**Partition coefficient (n-octanol/water)**

Not available.

**Auto-ignition temperature**

608 °F (320 °C) estimated

**Decomposition temperature**

Not available.

**Viscosity**

Not available.

**Other information****Percent volatile**

81.8 % estimated

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## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Nitrogen oxides (NO <sub>x</sub> ). Sodium oxides. Carbon oxides. Sulfur oxides.

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## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

### Information on toxicological effects

**Acute toxicity** Not known.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
coconut diethanolamide (CAS 68603-42-9)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
diethanolamine (CAS 111-42-2)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	8180 mg/kg
<b>Oral</b>		
LD50	Rat	680 mg/kg
sodium nitrite (CAS 7632-00-0)		
<b>Acute</b>		
<b>Inhalation</b>		
LC50	Rat	5.5 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	85 mg/kg
sodium xylenesulphonate (CAS 1300-72-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 2000 mg/kg
<b>Oral</b>		
LD50	Rat	> 3356 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes serious eye irritation.

### Respiratory or skin sensitization

<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.

<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Suspected of causing cancer.
<b>ACGIH Carcinogens</b>	
diethanolamine (CAS 111-42-2)	A3 Confirmed animal carcinogen with unknown relevance to humans.
<b>Canada - Manitoba OELs: carcinogenicity</b>	
diethanolamine (CAS 111-42-2)	Confirmed animal carcinogen with unknown relevance to humans.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
coconut diethanolamide (CAS 68603-42-9)	2B Possibly carcinogenic to humans.
diethanolamine (CAS 111-42-2)	2B Possibly carcinogenic to humans.
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

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## 12. Ecological information

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

Components	Species		Test Results
diethanolamine (CAS 111-42-2)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	61.8 - 86.04 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	100 mg/l, 96 hours
sodium laureth sulfate (CAS 9004-82-4)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Ceriodaphnia dubia)	2.43 - 4.01 mg/l, 48 hours
sodium nitrite (CAS 7632-00-0)			
<b>Aquatic</b>			
Crustacea	EC50	Greasyback shrimp (Metapenaeus ensis)	16.14 - 26.61 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (Oncorhynchus mykiss)	0.15 - 0.25 mg/l, 96 hours
sodium xylenesulphonate (CAS 1300-72-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Water flea (Daphnia magna)	> 1020 mg/l, 48 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

**Partition coefficient n-octanol / water (log Kow)**

diethanolamine -1.43

**Mobility in soil** No data available.

**Other adverse effects** No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

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## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Contaminated packaging**

Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport information****TDG**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**15. Regulatory information****Canadian regulations**

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**International regulations****Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**16. Other information**

**Issue date** 06-26-2019

**Version #** 01

**Further information**

CRC # 1751484

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**Revision information**

This document has undergone significant changes and should be reviewed in its entirety.