

# Safety Data Sheet

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

Date of issue: 08/01/2016 Revision date: 03/26/2019 Supersedes: 08/31/2018 Version: 1.5

# **SECTION 1: Identification**

1.1. Identification

Product form : Mixture

Trade name : Radiator Stop Leak

Product code : 8118

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Radiator additive

1.3. Supplier

**Bardahl Manufacturing Corporation** 

1400 NW 52nd Street

P.O. Box 70607

Seattle, WA 98107

T 206-783-4851 - F 206-784-3219

1.4. Emergency telephone number

Emergency number : 800-424-9300

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### **GHS-US** classification

Skin corrosion/irritation, Category 2 Serious eye damage/eye irritation, Category 2A Causes skin irritation.
Causes serious eye irritation.

### 2.2. GHS Label elements, including precautionary statements

#### **GHS US labelling**

Hazard pictograms (GHS US)



Signal word (GHS US) : Warning

Hazard statements (GHS US) : Causes skin irritation.

Causes serious eye irritation.

Precautionary statements (GHS US) : Wash hands thoroughly after handling.

Wear eye protection, protective gloves. If on skin: Wash with plenty of water

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

## 2.3. Other hazards which do not result in classification

No additional information available

## 2.4. Unknown acute toxicity (GHS US)

Not applicable

# **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

#### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Sodium Nitrite	(CAS-No.) 7632-00-0	1 - 20	Acute Tox. 3 (Oral), H301 Aquatic Acute 2, H401
Sodium Carbonate	(CAS-No.) 497-19-8	1 - 20	Skin Corr. 1A, H314

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Name	Product identifier	%	GHS-US classification
Sodium Nitrate	(CAS-No.) 7631-99-4	1 - 20	Acute Tox. 4 (Oral), H302

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

### **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Wash skin with plenty of water.

First-aid measures after eye contact : 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.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

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

Symptoms/effects after eye contact : Eye irritation.

#### 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

# **SECTION 5: Fire-fighting measures**

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Sand. Water spray. Dry powder. Foam. Carbon dioxide.

#### 5.2. Specific hazards arising from the chemical

No additional information available

### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attern

 Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

# **SECTION** 6: Accidental release measures

# 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes.

# 6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

# 6.2. Environmental precautions

Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

Other information : Dispose of materials or solid residues at an authorized site.

# 6.4. Reference to other sections

For further information refer to section 13.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal

protective equipment.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

product.

# 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

Storage temperature : 25 (5 - 42) °C

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

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#### Sodium Nitrite (7632-00-0)

Not applicable

### Sodium Carbonate (497-19-8)

Not applicable

### Sodium Nitrate (7631-99-4)

Not applicable

### 8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

# 8.3. Individual protection measures/Personal protective equipment

#### Personal protective equipment:

Safety glasses. Gloves. Protective clothing.

#### Hand protection:

Protective gloves

### Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Personal protective equipment symbol(s):







#### Other information:

Do not eat, drink or smoke when using this product.

# **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state : Liquid Appearance : Liquid. Colour : Green Odour : characteristic Odour threshold : No data available : >= 11 typical Melting point : Not applicable : <= 0 °C Freezing point : >= 100 °C Boiling point

Flash point : No data available
Relative evaporation rate (butylacetate=1) : No data available
Flammability (solid, gas) : Not applicable.
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available

Relative density : >= 1.06

Solubility : Soluble in water.

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Log Pow : -3.7 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask

Method; 25 °C) by sodium nitrite (7632-00-0)

Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : >= 2000 cP
Explosive limits : No data available
Explosive properties : No data available
Oxidising properties : No data available

9.2. Other information

VOC content : <= 10 g/l

# SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

#### 10.5. Incompatible materials

No additional information available

#### 10.6. Hazardous decomposition products

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

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Radiator Stop Leak	
LD50 oral rat	180 (≥ 180) mg/kg sodium nitrite (7632-00-0)
LD50 dermal rat	> 5000 mg/kg sodium nitrate (7631-99-4)
LD50 dermal rabbit	> 2000 mg/kg sodium carbonate (497-19-8)
LC50 inhalation rat (mg/l)	5.5 mg/l/4h sodium nitrite (7632-00-0)
ATE US (oral)	180 mg/kg
ATE US (vapours)	5.5 mg/l/4h
ATE US (dust,mist)	5.5 mg/l/4h

### Sodium Nitrite (7632-00-0)

ATE US (oral) 100 mg/kg bodyweight

Sodium Nitrate (7631-99-4)			
	Sodium	Nitrate	(7631-99-4)

ATE US (oral) 500 mg/kg bodyweight

Skin corrosion/irritation : Causes skin irritation.

pH: >= 11 typical

Serious eye damage/irritation : Causes serious eye irritation.

pH: >= 11 typical

Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : Not classified

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STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Symptoms/effects after eye contact : Eye irritation.

# **SECTION 12: Ecological information**

#### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

Radiator Stop Leak	
LC50 fish 1	300 mg/l (LC50; Other; 96 h; Lepomis macrochirus; Static system; Fresh water; Experimental value) by sodium carbonate (497-19-8)
EC50 other aquatic organisms 1	> 1700 mg/l (10 days; Algae; EC50; Other) by sodium nitrate (7631-99-4)
LC50 fish 2	4650 mg/l (LC50; Other; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value) by sodium nitrate (7631-99-4)
EC50 Daphnia 2	7240 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 24 h; Daphnia magna; Static system; Fresh water; Experimental value) by sodium nitrate (7631-99-4)
ErC50 (algae)	242 mg/l (EC50; 5 days; Algae) by sodium carbonate (497-19-8)

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

Radiator Stop Leak		
Log Pow	-3.7 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C) by sodium nitrite (7632-00-0)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	

# 12.4. Mobility in soil

No additional information available

# 12.5. Other adverse effects

Other information : Avoid release to the environment.

# **SECTION 13: Disposal considerations**

# 13.1. Disposal methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

# **SECTION 14: Transport information**

#### **Department of Transportation (DOT)**

In accordance with DOT

Not applicable

# **Transportation of Dangerous Goods**

Not applicable

### Transport by sea

Not applicable

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#### Air transport

Not applicable

# **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

No additional information available

### 15.2. International regulations

#### **CANADA**

No additional information available

#### **EU-Regulations**

No additional information available

#### **National regulations**

No additional information available

### 15.3. US State regulations

# **SECTION 16: Other information**

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### Full text of H-statements:

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H401	Toxic to aquatic life

NFPA health hazard : 1 - Materials that, under emergency conditions, can cause significant irritation.

significant initiation.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as

concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even

under fire conditions.

Hazard Rating
Health : 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT

react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : C

C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

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.

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