

# MATERIAL SAFETY DATA SHEET

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## HMIS RATINGS

(See Section 16 for  
additional information)

HEALTH: 2  
FLAMMABILITY: 0  
REACTIVITY: 0

\* Hercules Canada, Inc. and BetzDearborn Canada, Inc. carrying on business as Hercules Canada

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## 1 PRODUCT IDENTIFICATION

PRODUCT NAME:

**CAT SUPPLEMENTAL COOLANT ADDITIVE**

PRODUCT APPLICATION AREA:

**CATERPILLAR PART NUMBERS: 2Y2523, 3P2044, 5P2907, 6V3542, 8C3680,  
8T1589.**

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

Information for specific product ingredients as required by the WHMIS Regulations is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

### HAZARDOUS INGREDIENTS:

| Cas#       | Chemical Name  | Range (w/w%) |
|------------|--|--------------|
| 7632-00-0  | SODIUM NITRITE<br>Oxidizer; toxic (by ingestion); potential blood<br>toxin<br>ORAL LD50-RAT: 85 MG/KG<br>DERMAL LD50: NO DATA.<br>INHL. LC50-RAT: 1.45 MG/L/4HR                                | 3-7          |
| 12179-04-3 | BORIC ACID, DISODIUM SALT, PENTAHYDRATE<br>Irritant (abraded skin); slight irritant<br>(respiratory)<br>ORAL LD50-RAT: 3,400 MG/KG<br>DERMAL LD50-RABBIT: >2,000 MG/KG<br>INHL. LC50: NO DATA. | 3-7          |

|            |  |     |
|------------|--|-----|
| 10213-79-3 | SODIUM METASILICATE, PENTAHYDRATE<br>Corrosive (eyes, skin, and respiratory); potential kidney toxin<br>ORAL LD50: NO DATA.<br>DERMAL LD50: NO DATA.<br>INHL. LC50: NO DATA. | 3-7 |
| 7631-99-4  | SODIUM NITRATE<br>Oxidizer; potential blood toxin<br>ORAL LD50-RAT: 3,236 MG/KG<br>DERMAL LD50: NO DATA.<br>INHL. LC50: NO DATA.   | 1-5 |

**HAZARDOUS INGREDIENTS (continued):**

No component is considered to be a carcinogen by the U.S. National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC) or under WHMIS.

### 3 HAZARDS IDENTIFICATION

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**EMERGENCY OVERVIEW**

May cause slight irritation to the skin. Severe irritant to the eyes. Mists/aerosols may cause irritation to upper respiratory tract.

Odor: Slight; Appearance: Red-Purple, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

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**POTENTIAL HEALTH EFFECTS**

**ACUTE SKIN EFFECTS:**

Primary route of exposure; May cause slight irritation to the skin.

**ACUTE EYE EFFECTS:**

Severe irritant to the eyes.

**ACUTE RESPIRATORY EFFECTS:**

Mists/aerosols may cause irritation to upper respiratory tract.

**INGESTION EFFECTS:**

May cause gastrointestinal irritation.

**TARGET ORGANS:**

Prolonged or repeated exposures may cause CNS depression and/or toxicity to the kidney and blood.

**MEDICAL CONDITIONS AGGRAVATED:**

Not known.

**SYMPTOMS OF EXPOSURE:**

May cause redness or itching of skin, irritation, and/or tearing of eyes (direct contact).

## 4 FIRST AID MEASURES

**SKIN CONTACT:**

Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists.

**EYE CONTACT:**

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get immediate medical attention.

**INHALATION:**

If nasal, throat or lung irritation develops - remove to fresh air and get medical attention.

**INGESTION:**

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 3-4 glasses milk or water.

**NOTES TO PHYSICIANS:**

No special instructions

## 5 FIRE FIGHTING MEASURES

**FIRE FIGHTING INSTRUCTIONS:**

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

**EXTINGUISHING MEDIA:**

dry chemical, carbon dioxide, foam or water

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Thermal decomposition (destructive fires) yields elemental oxides.

**FLASH POINT:**

> 200F > 93C P-M(CC)

## 6 ACCIDENTAL RELEASE MEASURES

**PROTECTION AND SPILL CONTAINMENT:**

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Flush area with water. Wet area may be slippery. Spread sand/grit.

**DISPOSAL INSTRUCTIONS:**

The waste characteristics of the absorbed material, or any contaminated soil, should be determined in accordance with provincial regulations. Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement or discharged under provincial regulations. Incinerate or land dispose in an approved landfill.

## 7 HANDLING & STORAGE

**HANDLING:**

Contains an oxidizer. Avoid all contact with reducing agents, oils, greases, organics and acids. Do not allow to dry.

**STORAGE:**

Keep containers closed when not in use. Use approved containers

only. Do not freeze. If frozen, thaw and mix completely prior to use.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### EXPOSURE LIMITS

Consult local authorities for acceptable provincial values.

#### CHEMICAL NAME

SODIUM NITRITE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

BORIC ACID, DISODIUM SALT, PENTAHYDRATE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): 1 MG/M3

SODIUM METASILICATE, PENTAHYDRATE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

SODIUM NITRATE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

#### ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

#### RESPIRATORY PROTECTION:

If air-purifying respirator use is appropriate, use a respirator with dust/mist filters.

#### SKIN PROTECTION:

neoprene gloves-- Wash off after each use. Replace as necessary.

#### EYE PROTECTION:

splash proof chemical goggles

## 9 PHYSICAL & CHEMICAL PROPERTIES

|                           |       |                       |        |
|---------------------------|-------|-----------------------|--------|
| Specific Grav. (70F, 21C) | 1.121 | Vapor Pressure (mmHG) | ~ 18.0 |
| Freeze Point (F)          | 18    | Vapor Density (air=1) | < 1.00 |
| Freeze Point (C)          | -8    |                       |        |
| Viscosity (cps 70F, 21C)  | 8     | % Solubility (water)  | 100.0  |

|                            |                      |
|----------------------------|----------------------|
| Odor                       | Slight               |
| Appearance                 | Red-Purple           |
| Physical State             | Liquid               |
| Flash Point                | P-M(CC) > 200F > 93C |
| pH As Is (approx.)         | 12.0                 |
| Evaporation Rate (Ether=1) | < 1.00               |

NA = not applicable      ND = not determined

## 10 STABILITY & REACTIVITY

#### STABILITY:

Stable under normal storage conditions.

**HAZARDOUS POLYMERIZATION:**

Will not occur.

**INCOMPATIBILITIES:**

May react with strong oxidizers.

**DECOMPOSITION PRODUCTS:**

Thermal decomposition (destructive fires) yields elemental oxides.

**BETZDEARBORN INTERNAL PUMPOUT/CLEANOUT CATEGORIES:**

"B"

## 11 TOXICOLOGICAL INFORMATION

Oral LD50 RAT: >1,000 mg/kg

NOTE - Estimated value

Dermal LD50 RABBIT: >2,000 mg/kg

NOTE - Estimated value

## 12 ECOLOGICAL INFORMATION

**AQUATIC TOXICOLOGY**

No Data Available.

**BIODEGRADATION**

COD (mg/gm): 52 Calculated

TOC (mg/gm): 11 Calculated

BOD-5 (mg/gm): 0 Calculated

BOD-28 (mg/gm): 1 Calculated

## 13 DISPOSAL CONSIDERATIONS

Incinerate or bury in approved landfill. Please be advised that there may be additional local or provincial requirements relating to the disposal of waste. Consult provincial and local regulations regarding the proper disposal of this material.

## 14 TRANSPORT INFORMATION

**Transportation of Dangerous Goods:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.

(SODIUM NITRITE)

PIN:UN3082;CLASSIFICATION: 9.2;PACKING GROUP: III

## 15 REGULATORY INFORMATION

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

**CEPA:**

All components of this product comply with substance notification requirements under CEPA.

**WHMIS CLASSIFICATION:**

D2B

## 16 OTHER INFORMATION

**NFPA/HMIS****CODE TRANSLATION**

|        |   |                 |
|--------|---|-----------------|
| Health | 2 | Moderate Hazard |
| Fire   | 0 | Minimal Hazard  |

|                          |     |                |
|--------------------------|-----|----------------|
| Reactivity               | 0   | Minimal Hazard |
| Special                  | ALK | pH above 12.0  |
| (1) Protective Equipment | B   | Goggles,Gloves |

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

**CHANGE LOG**

|              | EFFECTIVE<br>DATE | REVISIONS TO SECTION: | SUPERCEDES  |
|--------------|-------------------|-----------------------|-------------|
|              | -----             | -----                 | -----       |
| MSDS status: | 04-JUN-1999       |                       | ** NEW **   |
|              | 18-MAY-2001       | 4,16                  | 04-JUN-1999 |
|              | 03-JUL-2001       | 14,15                 | 18-MAY-2001 |
|              | 13-AUG-2001       | 14                    | 03-JUL-2001 |

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