



Material Safety Data Sheet

Issue Date: 23-SEP-2011 Supercedes: 06-APR-2009

CORRSHIELD NT4203

1 Identification

Identification of substance or preparation CORRSHIELD NT4203

Product Application Area Water-based corrosion inhibitor.

Company/Undertaking Identification

GE Betz, Inc. 4636 Somerton Road Trevose, PA 19053 T 215 355-3300, F 215 953 5524

Emergency Telephone (800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 23-SEP-2011

2 Hazard(s) identification

EMERGENCY OVERVIEW

WARNING

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

DOT hazard: Corrosive to skin, Toxic Odor: Slight; Appearance: Yellow, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: Flood with water. Use of CO2 or foam may not be effective.

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

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

ACUTE EYE EFFECTS:

Severe irritant to the eyes.

ACUTE RESPIRATORY EFFECTS:

Mists/aerosols cause irritation to the upper respiratory tract.

INGESTION EFFECTS:

Toxic;

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May cause gastrointestinal irritation with possible nausea, vomiting, diarrhea, incoordination, mental confusion, dizziness and lethargy.
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TARGET ORGANS:

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

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

May cause redness or itching of skin.

3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD 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 Oxidizer; toxic (by ingestion); potential blood toxin	30-60

4 First-aid measures

SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. 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. Dilute contents of stomach. Induce vomiting by one of the standard methods. Immediately contact a physician.

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: Flood with water. Use of CO2 or foam may not be effective. HAZARDOUS DECOMPOSITION PRODUCTS: oxides of nitrogen FLASH POINT: > 200F > 93C P-M(CC) MISCELLANEOUS: Corrosive to skin, Toxic UN 2922;Emergency Response Guide #154

6 Accidental release measures

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PROTECTION AND SPILL CONTAINMENT:
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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:

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

7 Handling and 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. Protect from freezing.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

SODIUM NITRITE PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA. TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.

ENGINEERING CONTROLS:

adequate ventilation

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PERSONAL PROTECTIVE EQUIPMENT:
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Use protective equipment in accordance with 29CFR 1910 Subpart I **RESPIRATORY PROTECTION:**

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE. USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS. If air-purifying respirator use is appropriate, use any of the following particulate respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

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SKIN PROTECTION:
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rubber, butyl, viton or neoprene gloves -- Wash off after
each use. Replace as necessary.
EYE PROTECTION:
   splash proof chemical goggles
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9 Physical and chemical properties

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Spec. Grav. (70F, 21C) 1.303
                                      Vapor Pressure (mmHG)
                                                              ~ 18.0
Freeze Point (F)
Freeze Point (C)
                      10
                                     Vapor Density (air=1)
                                                              < 1.00
                      -12
Viscosity(cps 70F,21C) 18
                                      % Solubility (water)
                                                              100.0
Odor
                                   Slight
Appearance
                                  Yellow
Physical State
Flash Point
                                  Liquid
                  P-M(CC)
                                  > 200F > 93C
                                  12.2
pH As Is (approx.)
Evaporation Rate (Ether=1)
                                   < 1.00
Percent VOC:
                                    0.0
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NA = not applicable ND = not determined

10 Stability and reactivity

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CHEMICAL STABILITY:
   Stable under normal storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS:
   Contact with strong acids may cause a violent reaction releasing
   heat.
INCOMPATIBILITIES:
   May react with acids or strong oxidizers.
DECOMPOSITION PRODUCTS:
   oxides of nitrogen
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11 Toxicological information

Oral LD50 RAT: 210 mg/kg NOTE - Calculated value according to GHS additivity formula Inhalation LC50 RAT: 3 mg/L/4hr NOTE - Calculated value according to GHS additivity formula

12 Ecological information

AQUATIC TOXICOLOGY

Daphnia magna 48 Hour Static Acute Bioassay LC50= 638; No Effect Level= 240 mg/L Fathead Minnow 96 Hour Acute Toxicity (Estimated) LC50= 930; No Effect Level= 620 mg/L Rainbow Trout 96 Hour Static Acute Bioassay LC50= 303; No Effect Level= 135 mg/L

BIODEGRADATION

Product contains only inorganics that are not subject to typical biological degradation. Assimilation by microbes may occur in waste treatment or the environment.

COD (mg/g): 92

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is : Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

14 Transport information

Transportation Hazard: Corrosive to skin, Toxic
DOT: CORROSIVE LIQUIDS, TOXIC, N.O.S.(SODIUM HYDROXIDE, SODIUM
NITRITE)
 8(6.1), UN2922, PG III, (SODIUM NITRITE) RQ
DOT EMERGENCY RESPONSE GUIDE #: 154
Note: Some containers may be DOT exempt, please check BOL for
exact container classification
IATA: CORROSIVE LIQUID, TOXIC, N.O.S.(SODIUM HYDROXIDE, SODIUM
NITRITE)
 8(6.1), UN2922, PG III
IMDG: CORROSIVE LIQUIDS, TOXIC, N.O.S.(SODIUM HYDROXIDE, SODIUM
NITRITE)
 8(6.1), UN2922, PG III

15 Regulatory information

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TSCA:
          All components of this product are included on or are in
          compliance with the U.S. TSCA regulations.
    CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):
          23 gallons due to SODIUM NITRITE;
    FOOD AND DRUG ADMINISTRATION:
          21 CFR 176.170 (components of paper and paperboard in contact
          with aqueous and fatty foods)
   NSF Registered and/or meets USDA (according to 1998 Guidelines):
          Registration number: Not Registered
    SARA SECTION 312 HAZARD CLASS:
          Immediate(acute);Delayed(Chronic)
    SARA SECTION 302 CHEMICALS:
          No regulated constituent present at OSHA thresholds
    SARA SECTION 313 CHEMICALS:
                                                                  RANGE
       CAS#
                              CHEMICAL NAME
       7632-00-0
                              SODIUM NITRITE
                                                                  31.0-40.0%
CALIFORNIA REGULATORY INFORMATION
    CALIFORNIA SAFE DRINKING WATER AND TOXIC
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ENFORCEMENT ACT (PROPOSITION 65): No regulated constituents present No regulated constituent present at OSHA thresholds

16 Other information

HMIS VII

CODE TRANSLATION

Health	2	Moderate Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	В	Goggles,Gloves

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

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status:	28-JAN-1997 28-APR-1997 21-AUG-1998 30-JAN-2002 04-APR-2006 06-APR-2009 23-SEP-2011	3,5,14 3,5,14 15 3,5,14 5,8,10 11	** NEW ** 28-JAN-1997 28-APR-1997 21-AUG-1998 30-JAN-2002 04-APR-2006 06-APR-2009