ANGUS CHEMICAL COMPANY encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th><strong>Product name</strong></th>
<th>CORR GUARD® SI Corrosion Inhibitor</th>
</tr>
</thead>
</table>

**Manufacturer or supplier’s details**

**Company name of supplier**

ANGUS CHEMICAL COMPANY

**Address**

1500 E. LAKE COOK ROAD
Buffalo Grove IL 60089-6553

**Customer Information Number**

+1-847-808-3711

**E-mail address**

NAR_CC@ANGUS.COM

**Emergency telephone number**

800-424-9300

**Recommended use of the chemical and restrictions on use**

**Recommended use**

Metalworking corrosion inhibitor

For industrial use.

The ANGUS Chemical Company recommends that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact the Customer Information Group (see Section 1 of this data sheet).

## 2. HAZARDS IDENTIFICATION

**GHS Classification**

Not a hazardous substance or mixture.

**GHS Label elements, including precautionary statements**

This product is not hazardous per the Globally Harmonized System of Classification and Labelling (GHS).
Other hazards
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This product is a mixture.

Components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade secret organic material</td>
<td>Trade Secret</td>
<td>&gt;= 88.0 %</td>
</tr>
<tr>
<td>(Trade secret)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Butoxy-2-propanol</td>
<td>5131-66-8</td>
<td>&lt;= 6.0 %</td>
</tr>
<tr>
<td>Impurities (None)</td>
<td>Not Assigned</td>
<td>&lt;= 4.0 %</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&lt;= 2.0 %</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

If inhaled
Move person to fresh air; if effects occur, consult a physician.

In case of skin contact
Wash off with plenty of water.

In case of eye contact
Flush eyes thoroughly with water for several minutes.
Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

If swallowed
If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Most important symptoms and effects, both acute and delayed
Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Protection of first-aiders
If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Notes to physician
Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.
No specific antidote.

5. FIREFIGHTING MEASURES

Suitable extinguishing media
Water fog or fine spray.
Carbon dioxide fire extinguishers.
Dry chemical fire extinguishers.
Foam.
Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.
Unsuitable extinguishing media
Do not use direct water stream.
May spread fire.

Specific hazards during firefighting
None known.

Hazardous combustion products
During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.
Combustion products may include and are not limited to:
Carbon monoxide.
Carbon dioxide.
Nitrogen oxides.

Further information
Avoid accumulation of water. Product may be carried across water surface spreading fire or contracting an ignition source. Keep people away. Isolate fire and deny unnecessary entry. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special protective equipment for firefighters
Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).
If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Isolate area.
Keep unnecessary and unprotected personnel from entering the area.
Refer to section 7, Handling, for additional precautionary measures.
Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions
Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up
Contain spilled material if possible.
Collect in suitable and properly labeled containers.
See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Advice on safe handling
Avoid contact with eyes.
Wash thoroughly after handling.
See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Conditions for safe storage
Avoid storage at temperatures < 50F (10C); low temperatures will cause the product to solidify and become difficult to
remove from the drum.
Product can darken if exposed to air for long periods or at elevated temperatures.
Do not store near
Strong oxidizers. 
Do not store in:
Copper.
Copper alloys.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Components with workplace control parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS-No.</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>5131-66-8</td>
</tr>
</tbody>
</table>

**Engineering measures**
Local exhaust ventilation may be necessary for some operations.
Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations.

**Personal protective equipment**

**Respiratory protection**
Under intended handling conditions, no respiratory protection should be needed.

**Hand protection**
Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur.
Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Viton. Neoprene. Natural rubber ("latex"). Polyvinyl chloride ("PVC" or "vinyl"). Nitrile/butadiene rubber ("nitrile" or "NBR"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to:
Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Eye protection**
Use safety glasses (with side shields).

**Skin and body protection**
Wear clean, body-covering clothing.
# 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid or gel-like solid</td>
</tr>
<tr>
<td>Color</td>
<td>Yellow to brown</td>
</tr>
<tr>
<td>Odor</td>
<td>Mild</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No test data available</td>
</tr>
<tr>
<td>pH</td>
<td>7.9</td>
</tr>
<tr>
<td>Melting point/range</td>
<td>No test data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No test data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>&gt; 170 °C (&gt; 338 °F)</td>
</tr>
<tr>
<td>Flash point</td>
<td>99 °C (210 °F)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No test data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No test data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No test data available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No test data available</td>
</tr>
<tr>
<td>Relative Vapor Density (air = 1)</td>
<td>No test data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>0.9398 (25 °C)</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Slightly soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No test data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No test data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No test data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>1,619 mPa.s (25 °C)</td>
</tr>
<tr>
<td></td>
<td>(Brookfield Viscosity)</td>
</tr>
</tbody>
</table>
Viscosity, kinematic  No test data available

Explosive properties  No data available.

Oxidizing properties  No data available.

Molecular weight  Not available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity  No dangerous reaction known under conditions of normal use.

Chemical stability  Thermally stable at typical use temperatures.

Possibility of hazardous reactions  Hazardous polymerisation does not occur.

Conditions to avoid  Exposure to elevated temperatures can cause product to decompose.

Incompatible materials  Avoid contact with oxidizing materials.

Hazardous decomposition products  Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include trace amounts of: Aldehydes. Ketones. Organic acids. Decomposition products can include and are not limited to: Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Toxicological information on this product or its components appear in this section when such data is available.

Acute toxicity

Product:

Acute oral toxicity  Remarks: Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Low toxicity if swallowed.

LD50 (Rat): > 2,000 mg/kg

Method: Estimated.

Assessment: The substance or mixture has no acute oral toxicity

Remarks: Based on information for component(s):
Acute inhalation toxicity Remarks: At room temperature, exposure to vapor is minimal due to low volatility; single exposure is not likely to be hazardous.
Remarks: The LC50 has not been determined.

Acute dermal toxicity Remarks: Prolonged skin contact is unlikely to result in absorption of harmful amounts.
LD50 (Rabbit): > 2,000 mg/kg
Method: Estimated.
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on information for component(s):

Components:

Acute oral toxicity LD50 (Rat, male and female): 3,300 mg/kg

Acute inhalation toxicity Remarks: Brief exposure (minutes) is not likely to cause adverse effects.
No relevant data found.
For respiratory irritation and narcotic effects:
LC50 (Rat): > 3.5 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity LD50 (Rat, male and female): > 2,000 mg/kg

Acute oral toxicity LD50 (Rat, male and female): 3,300 mg/kg

Acute inhalation toxicity Remarks: Brief exposure (minutes) is not likely to cause adverse effects.
No relevant data found.
For respiratory irritation and narcotic effects:
LC50 (Rat): > 3.5 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Symptoms: No deaths occurred at this concentration.
Assessment: The substance or mixture has no acute inhalation toxicity

Skin corrosion/irritation

Product:
Result: No skin irritation
Remarks: Prolonged contact may cause slight skin irritation with local redness.

Components:

Result: Skin irritation
Remarks: Brief contact may cause moderate skin irritation with local redness.

Result: Skin irritation
Remarks: Brief contact may cause moderate skin irritation with local redness.

Serious eye damage/eye irritation

Product:
Result: No eye irritation
Remarks: May cause slight eye irritation. Corneal injury is unlikely.

Components:

Result: Mild eye irritation
Remarks: May cause moderate eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. Effects are likely to heal readily.

Result: Mild eye irritation
Remarks: May cause moderate eye irritation. May cause slight corneal injury. Vapor may cause eye irritation experienced as mild discomfort and redness. Effects are likely to heal readily.

Respiratory or skin sensitization

Product:
Remarks: For skin sensitization:
Based on information for component(s):
Did not cause allergic skin reactions when tested in guinea pigs.
Remarks: For respiratory sensitization:
No relevant information found.

Components:

Assessment: Does not cause skin sensitization.
Remarks: For similar material(s):
Did not cause allergic skin reactions when tested in guinea pigs.
Remarks: For respiratory sensitization:  
No relevant data found.

Assessment: Does not cause skin sensitization.  
Remarks: For similar material(s):  
Did not cause allergic skin reactions when tested in guinea pigs.

Remarks: For respiratory sensitization:  
No relevant data found.

**Carcinogenicity**

**Product:**  
No relevant data found.

**Components:**

No relevant data found.

**IARC**
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**OSHA**
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**NTP**
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**Teratogenicity**

**Product**
Contains component(s) which did not cause birth defects or any other fetal effects in lab animals.

**Components:**

Did not cause birth defects or any other fetal effects in laboratory animals.

Did not cause birth defects or any other fetal effects in laboratory animals.

**Mutagenicity**
**Product**
Contains component(s) which were negative in animal genetic toxicity studies.
Contains a component(s) which were negative in in vitro genetic toxicity studies.

**Components:**

In vitro genetic toxicity studies were negative.
In vitro genetic toxicity studies were negative.

**Reproductive toxicity**

**Product:**
Contains component(s) which did not interfere with reproduction in animal studies.

**Components:**

In animal studies, did not interfere with reproduction. For similar material(s):

In animal studies, did not interfere with reproduction. For similar material(s):

**STOT - single exposure**

**Product:**
Assessment: Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Components:**

Assessment: Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Assessment: Evaluation of available data suggests that this material is not an STOT-SE toxicant.

**Repeated dose toxicity**

**Product:**
Remarks: No relevant data found.

**Components:**

Remarks: Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.

Remarks: Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects.
Aspiration toxicity

**Product:**
Aspiration Hazard
Based on physical properties, not likely to be an aspiration hazard.

**Components:**
Based on physical properties, not likely to be an aspiration hazard.

Based on physical properties, not likely to be an aspiration hazard.

---

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

<table>
<thead>
<tr>
<th>Toxicity to fish</th>
<th>Remarks: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 &gt;100 mg/L in the most sensitive species tested).</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LC50 (Poecilia reticulata (guppy)): &gt; 560 mg/l</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 96.0 h</td>
</tr>
<tr>
<td></td>
<td>Test Type: static test</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 203 or Equivalent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to daphnia and other aquatic invertebrates</th>
<th>EC50 (Daphnia magna (Water flea)): &gt; 1,000 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 48.0 h</td>
</tr>
<tr>
<td></td>
<td>Test Type: static test</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 202 or Equivalent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to algae</th>
<th>EC50 (Pseudokirchneriella subcapitata (green algae)): &gt; 1,000 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>End point: Growth inhibition (cell density reduction)</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 96 h</td>
</tr>
<tr>
<td></td>
<td>Test Type: static test</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 201 or Equivalent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to bacteria</th>
<th>NOEC (Pseudokirchneriella subcapitata (green algae)): 560 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>End point: Growth inhibition (cell density reduction)</td>
</tr>
<tr>
<td></td>
<td>Exposure time: 96 h</td>
</tr>
<tr>
<td></td>
<td>Test Type: static test</td>
</tr>
<tr>
<td></td>
<td>Method: OECD Test Guideline 201 or Equivalent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Toxicity to bacteria</th>
<th>EC50 (Bacteria): &gt; 1,000 mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exposure time: 3 h</td>
</tr>
<tr>
<td></td>
<td>Test Type: static test</td>
</tr>
</tbody>
</table>
Toxicity to fish

Remarks: Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50 (Poecilia reticulata (guppy)): > 560 mg/l
Exposure time: 96.0 h
Test Type: static test
Method: OECD Test Guideline 203 or Equivalent

Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 48.0 h
Test Type: static test
Method: OECD Test Guideline 202 or Equivalent

Toxicity to algae

EC50 (Pseudokirchneriella subcapitata (green algae)): > 1,000 mg/l
End point: Growth inhibition (cell density reduction)
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 201 or Equivalent

NOEC (Pseudokirchneriella subcapitata (green algae)): 560 mg/l
End point: Growth inhibition (cell density reduction)
Exposure time: 96 h
Test Type: static test
Method: OECD Test Guideline 201 or Equivalent

Toxicity to bacteria

EC50 (Bacteria): > 1,000 mg/l
Exposure time: 3 h
Test Type: static test

Persistence and degradability

Components:

Biodegradability

Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

Biodegradation: 85 - 92 %
Exposure time: 28 d
Method: OECD Test Guideline 301C or Equivalent
Remarks: 10-day Window: Not applicable

Biochemical Oxygen Demand (BOD)

1.1 - 1.5 %
Incubation time: 5 d

6.6 - 33.3 %
Incubation time: 20 d

ThOD

2.420 mg/mg

Biodegradability

Remarks: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.
Biodegradation: 85 - 92 %
Exposure time: 28 d
Method: OECD Test Guideline 301C or Equivalent
Remarks: 10-day Window: Not applicable

Biochemical Oxygen Demand (BOD)
Biological Oxygen Demand (BOD) 1.1 - 1.5 %
Incubation time: 5 d
6.6 - 33.3 %
Incubation time: 20 d

ThOD 2.420 mg/mg

Bioaccumulative potential

Product:
Partition coefficient: n-octanol/water Remarks: No test data available

Components:

Partition coefficient: n-octanol/water Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

\[
\log Pow: 1.2 \text{ (20 °C)} \\
\text{Method: Measured}
\]

Partition coefficient: n-octanol/water Remarks: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

\[
\log Pow: 1.2 \text{ (20 °C)} \\
\text{Method: Measured}
\]

Mobility in soil

Components:

Distribution among environmental compartments Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

\[
\text{Koc: 1.3 - 6} \\
\text{Method: Estimated.}
\]

Distribution among environmental compartments Remarks: Potential for mobility in soil is very high (Koc between 0 and 50).

\[
\text{Koc: 1.3 - 6} \\
\text{Method: Estimated.}
\]
Other adverse effects

Product:

Ozone-Depletion Potential
Regulation: 40 CFR Protection of Environment; Part 82
Protection of Stratospheric Ozone - CAA Section 602 Class I
Substances
Remarks: This product neither contains, nor was
manufactured with a Class I or Class II ODS as defined by the
U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A +
B).

Components:

Results of PBT and vPvB
assessment
This substance is not considered to be persistent,
bioaccumulating and toxic (PBT). This substance is not
considered to be very persistent and very bioaccumulating
(vPvB).

Ozone-Depletion Potential
Remarks: This substance is not in Annex I of Regulation (EC)
No 1005/2009 on substances that deplete the ozone layer.

Results of PBT and vPvB
assessment
This substance is not considered to be persistent,
bioaccumulating and toxic (PBT). This substance is not
considered to be very persistent and very bioaccumulating
(vPvB).

Ozone-Depletion Potential
Remarks: This substance is not in Annex I of Regulation (EC)
No 1005/2009 on substances that deplete the ozone layer.

13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues
DO NOT DUMP INTO ANY SEWERS, ON THE GROUND,
OR INTO ANY BODY OF WATER.
All disposal practices must be in compliance with all Federal,
State/Provincial and local laws and regulations.
Regulations may vary in different locations.
Waste characterizations and compliance with applicable laws
are the responsibility solely of the waste generator.
THE INFORMATION PRESENTED HERE PERTAINS ONLY
TO THE PRODUCT AS SHIPPED IN ITS INTENDED
CONDITION AS DESCRIBED IN MSDS SECTION:
Composition Information.
FOR UNUSED & UNCONTAMINATED PRODUCT, the
preferred options include sending to a licensed, permitted:
Incinerator or other thermal destruction device.
Landfill.
ANGUS HAS NO CONTROL OVER THE MANAGEMENT
PRACTICES OR MANUFACTURING PROCESSES OF
PARTIES HANDLING OR USING THIS MATERIAL.
14. TRANSPORT INFORMATION

International Regulation

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

49 CFR (DOT) – NON BULK
Not regulated as a dangerous good

49 CFR (DOT) - BULK
Not regulated as a dangerous good

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

OSHA Hazards
This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

No OSHA Hazards

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards
This product is not a hazardous chemical under 29CFR 1910.1200, and therefore is not covered by Title III of SARA.
No SARA Hazards
SARA 302
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act
This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know
The following chemicals are listed because of the additional requirements of Pennsylvania law:

<table>
<thead>
<tr>
<th>Cas No.</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>Component(s)</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Component(s)</td>
</tr>
</tbody>
</table>

New Jersey Right To Know
The following chemicals are listed because of the additional requirements of New Jersey law:

<table>
<thead>
<tr>
<th>Cas No.</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>Component(s)</td>
</tr>
<tr>
<td>Trade Secret</td>
<td>Component(s)</td>
</tr>
<tr>
<td>7732-18-5</td>
<td>Water</td>
</tr>
<tr>
<td>2-(Methylamino)2-methyl-1-propanol/Tall Oil Fatty Acid Salt</td>
<td></td>
</tr>
</tbody>
</table>

California Prop. 65
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:
United States TSCA Inventory
All Components OK
16. OTHER INFORMATION

Further information

NFPA:

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Health</th>
<th>Instability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Special hazard.

HMIS III:

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>PHYSICAL HAZARD</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

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Version: 1.0
Identification Number: 000040000047

US / EN

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Full text of other abbreviations

(Q)SAR - (Quantitative) Structure Activity Relationship; ASTM - American Society for the Testing of Materials; bw - Body weight; DIN - Standard of the German Institute for Standardisation; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying
Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50% of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; DOT - Department of Transportation; EHS - Extremely Hazardous Substance; HMIS - Hazardous Materials Identification System; MSHA - Mine Safety and Health Administration; NFPA - National Fire Protection Association; RCRA - Resource Conservation and Recovery Act; RQ - Reportable Quantity; SARA - Superfund Amendments and Reauthorization Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice; ERG - Emergency Response Guide; NTP - National Toxicology Program; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods