

Print Date: November 8, 2018

# Section 1: Product & Company Information

**Product Identifier: Sodium Nitrite** 

Other Means of Identification

Product Number: 131501

**Recommended Use and Restrictions on Use** 

Recommended Use: For Commercial Use

Restrictions on Use: This Product is not to be used as a pesticide.

Manufacturer / Importer / Supplier / Distributor Information

Company Name: CORECHEM Inc. Address: 4320 Greenway Drive

Knoxville, TN 37918

Information Telephone Number: 1-865-524-4239

Fax Number: 1-865-524-3375 Website: www.corecheminc.com Contact Person: Regulatory Manager

E-mail: regulatory@corecheminc.com

Emergency Phone Number: Chemtrec® 1-800-424-9300 / Outside USA 1-703-527-3887 (monitored 24 hours/day)

## Section 2: Hazards Identification

## GHS Hazard Classification(s)

In accordance with OSHA Hazard Communication Standard 29 CFR 1910.1200 (HazCom 2012).

## Physical Hazard(s)

Oxidizing, Liquids - 3

### Health Hazard(s)

Acute Toxicity, Oral - 3 (Corrosion)Damage/Irritation, Eye - 2A

# **Environmental Hazard(s)**

Aquatic, Acute - 1 Aquatic, Chronic - 1

### **Label Elements** Signal Word **DANGER**

## Hazard Symbol(s)







## Hazard Statement(s)

H272: May intensify fire; oxidizer. H301: Toxic if swallowed. H319: Causes serious eye Irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

### **Precautionary Statements**

### General

Not applicable.

### Prevention

P210: Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P220: Keep/Store away from clothing/combustible materials.

P221: Take any precaution to avoid mixing with combustibles.

P264: Wash face, hands and any exposed skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

### Response

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.



Print Date: November 8, 2018

P321: Specific treatment (see supplemental first aid instructions on this label).

P330: Rinse mouth.

P337 + P313: If eye irritation persists: Get medical advice/attention.

P370 + P378: In case of fire: Use suitable extinguishing media for extinction.

P391: Collect spillage.

#### Storage

P405: Store locked up.

### Disposal

P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### Hazard(s) not otherwise classified (HNOC)

None known.

# Section 3: Composition/Information on Ingredients

### Substance

Chemical Identity <sup>2</sup>	Common Name/Synonym(s)	CAS# <sup>3</sup>	Weight %	Impurity or Stabilizing Additive
Sodium Nitrite	-	7632-00-0	100%	No

- 1. Information regarding the composition and the percent ranges of the mixtures ingredients are not presented as it Confidential Business Information (CBI). Where a medical emergency exists (as determined by medical professional), timely disclosure of CBI is assured. The information omitted pertains to only the names of the substances and the concentration in the mixture (product) and can only be requested by a doctor/physician or Local/State/Provincial or Federal Authority.
- 2. Non-hazardous ingredients are not presented as to protect the proprietary formula of the product.
- 3. "—"Indicates ingredient is a mixture and contains multiple ingredients or may have no identifying CAS number.

## **Section 4: First-Aid Measures**

#### General Information

Sodium Nitrite is a white Granular or Crystalline Solid. It is harmful if it is inhaled. May be fatal if swallowed. May be absorbed thru the skin. Overexposure may produce symptoms such as palpitations, headaches, blood pressure drops, and visual disturbances. This product reacts with amines to produce carcinogenic nitrosamines. Sodium Nitrite is deliquescent and will absorb moisture from the air. Sodium Nitrite is not combustible, However, as an organic Solid, Dusts of this product may create an explosion hazard in the presence of a source of ignition. Sodium Nitrite is an Oxidizer, which may increase the intensity of a fire. Toxic Fumes may be produced in a fire. Firefighters should wear full protective equipment and clothing.

### Inhalation

Remove source of contamination or move victim to fresh air. Apply artificial Respiration if victim is not breathing. Do not use mouth to mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical devise. Administer oxygen if breathing is difficult. Get immediate medical attention.

### **Skin Contact**

 $Remove\ all\ contaminated\ clothing.\ For\ skin\ contact,\ was\ extremely\ thoroughly\ with\ soap\ and\ water.\ Seek\ medical\ attention\ if\ irritation\ develops\ or\ persists.$ 

### **Eye Contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.

### Ingestion

DO NOT INDUCE VOMITING. If swallowed, wash out mouth with water, provided person is conscious. Never give anything by mouth to a victim who is unconscious or having convulsions. Contact a physician or poison control center immediately.

### Most important symptoms/effects, acute and delayed

## **Symptoms**

No data available.

### Indication of immediate medical attention and special treatment needed

### Hazards

No data available.

# Treatment

Treat symptomatically. Symptoms may be delayed.

# **Section 5: Fire-Fighting Measures**

### General Fire Hazards

Material is non-combustible but will accelerate the burning of combustible materials. Contact with organic matter will ignite by friction. Toxic Nitrogen oxides will be released in fire involving this material. If large quantities are involved, or the material is finely divided, an explosion may result. Sodium Nitrite explodes at temperatures above 1000 deg. For wen in contact with cyanides, ammonia salts, cellulose, lithium, potassium and ammonia, or sodium thiosulfate. Containers may explode in a fire.

# Suitable (and Unsuitable) Extinguishing Media

### Suitable Extinguishing Media

Use water in very large amounts as needed.

# **Unsuitable Extinguishing Media**

Do not use dry chemicals, CO2, Halon or foams.



Print Date: November 8, 2018

#### Specific Hazards Arising from the Chemical

Strong oxidizer - contact with other material may cause fire. Explosion risk in case of fire.

### **Special Protective Equipment and Precautions for Firefighters**

## **Special Fire-Fighting Equipment Procedures**

Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

# **Special Protective Equipment for Fire-Fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand (OSHA/NIOSH approved or equivalent) and full protective gear.

# Section 6: Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures

Evacuate the area promptly and keep upwind of the spilled material. Isolate the spill area to prevent people from entering. Keep materials which can burn away from the spilled material. In case of large spills follow all facility emergency response procedures.

#### Methods and Materials for Containment and Clean-Up

Stop the flow of the material, if this can be done without risk. Contain the discharged material. If sweeping of a contaminated area is necessary, use a dust suppressant agent which does not react with the product. DO NOT USE SAWDUST. Small releases can be cleaned up wearing gloves., goggles and suitable body protection. In case of a large spill (in which excessive dusts can be generated), Clear the effected area, protect people, and respond with trained personnel. If a vacuum is used for spill cleanup, only and explosion proof vacuum should be used, due to the potential for dust explosion. Do not allow for the spilled product to enter public drainage systems or open water courses. Place all spill residue in an appropriate container and seal. Thoroughly wash the area after a spill or leak clean-up. Avoid contamination of soil and prevent spill residue from running to groundwater or storm drains.

#### **Notification Procedures**

Notify authorities if any exposure to the public or environment occurs or is likely to occur. Local authorities should be advised if significant spillages cannot be contained.

#### **Environmental Precautions**

Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

# Section 7: Handling and Storage

# Precautions for Safe Handling

All Employees who handle this material should be trained to handle it safely. Do not breathe dust. Avoid all contact with skin and eyes. Avoid accumulation of dusts of this product. Wherever dust clouds may be generated, eliminate sparks, flames and other ignition sources. Periodically wash-down areas where this product is used to avoid dust accumulation. Use this product only with Adequate ventilation. Wash thoroughly after handling.

### Conditions for Safe Storage, including any Incompatibilities

Sodium Nitrite at 460 degrees F in contact with a combustible container in which it is shipped undergoes vigorous decomposition reactions producing propellant type burning until container is consumed. Keep container tightly closed when it is not in use. If this product is transferred into another container, only use portable containers and tools approved for oxidizing solids. Store containers in a cool, dry place away from direct sunlight, sources of intense heat, or where freezing is possible. Material should store in secondary containers or in a diked area as appropriate. Store containers away from incompatible chemicals. Store containers away from wood, cardboard boxes, and other combustible materials. Storage areas should be made of corrosion and fire-resistant materials. Post warning and NO SMOKING signs in storage areas as appropriate. Use corrosion resistant structural materials, lighting, and ventilation systems in storage areas. Floors should be sealed to prevent absorption of this material. Inspect all incoming containers before storage, to ensure containers are appropriately labeled and not damaged. Have appropriate extinguishing material in the storage area. (i.e. sprinkler systems, portable fire extinguishers.) Refer to NFPA 43A, Liquid, Solid oxidizers, for additional information on storage. Empty containers may contain residual particulates. Therefore, empty containers should be handled with care. Never store food, feed or drinking water in containers which held this product. Keep this material away from food, drink and animal feed. Do not store this material in open or unlabeled containers. Limit quantity of material stored.

## Section 8: Exposure Controls/Personal Protection

# **Control Parameters**

### Occupational Exposure Limits

occupational Exposure Ellinis				
Chemical Identity	Type	Value	Source	
Sodium Nitrite (inhalable fraction)	TWA	10 mg/m³	ACGIH	
Sodium Nitrite (Respirable fraction)	TWA	3 mg/m³	ACGIH	
Sodium Nitrite (Total Dust)	TWA	15mg/m³	US OSHA Table Z-1	
Sodium Nitrite (Respirable fraction)	TWA	5 mg/ m³	US OSHA Table Z-1	
Sodium Nitrite (Inhalable fraction)	TWA	4 mg/m³	DFG MAKs	
Sodium Nitrite (Respirable Fraction)	TWA	1.5 mg/ m³	DFG MAKs	

## **Biological Limit Values**

The product does not contain any relevant quantities of hazardous materials with assigned biological limit values.

# **Appropriate Engineering Controls**

Use mechanical Ventilation such as dilution and local exhaust. Use a corrosion-resistant ventilation system and exhaust directly to the outside. Supply ample air replacement. Provide dust collectors with explosion vents.

# Individual protection measures, such as personal protective equipment (PPE)

**General Information** 



Print Date: November 8, 2018

Good general ventilation (typically 10 air changes per hour) 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. Eye wash facilities and emergency shower must be available when handling this product.

### **Eye/Face Protection**

Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

### Skin Protection

#### **Hand Protection**

Wear appropriate chemical resistant gloves.

#### Other

Wear appropriate chemical resistant clothing.

# **Respiratory Protection**

No specific Guidelines are available. If Airborne concentrations are above the applicable exposure limits, use NIOSH-approved respiratory protection. An approved dust and mist air-purifying respirator may be adequate. If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134) applicable U.S. State regulations. Oxygen levels below 19.5% are considered IDLH by Osha. In such atmospheres, use a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA'S respiratory Protection Standard. (1910.134-1998)

# **Hygiene Measures**

When using, do not eat, drink or smoke. Always observe good personal hygienemeasures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated footwear that cannot be cleaned. Wash hands before breaks and immediately after handling the product. Wash contaminated clothing before reuse. Avoid contact with eyes, skin, and clothing.

# **Section 9: Physical and Chemical Properties**

Appearance:

Physical State: Granular or crystalline Solid

Color: White Odorless

**Odor Threshold:** No data available.

pH: Aqueous solutions are alkaline.

Melting Point/Freezing Point: 519 deg. F (271 deg C)

Initial Boiling Point and Boiling Range: 320 °C / 608 °F

**Flash Point:** Exploded at 537 °C / 1000 °F

Evaporation Rate (butyl acetate=1): No data available.
Flammability (solid, gas): No data available.
Upper/Lower Limit on Flammability or Explosive Limits
Flammability Limit – Upper: Not applicable.
Explosive Limit – Upper: Not applicable.

Explosive Limit – Upper: Not applicable.
Explosive Limit – Lower: Not applicable.

Vapor Pressure: Not applicable
Vapor Density (air = 1): 2.4 air = 1

Relative Density (water=1): No data available.

Solubility(ies):

Solubility in water: Readily Soluable Solubility (other): No data available.

Partition coefficient (n-octanol/water): No data available.

Auto-Ignition Temperature: 538 °C / 1000 °F
Decomposition Temperature: Not applicable.
Viscosity: No data available.

Other Information:

Molecular Weight: 69 g/mol Formula: NaHNO<sub>2</sub>

# **Section 10: Stability and Reactivity**

### Reactivity

Contact with combustible material may cause fire.

### Chemical Stability

Avoid High temperatures and ignition sources. Keep away from materials which can burn. Solution of sodium nitrite are unstable and should be prepared directly before use. Sodium Nitrite very slowly oxidizes in air.

# Possibility of Hazardous Reactions

This material reacts violently with oxidants forming flammable/explosive gas.

### **Conditions to Avoid**

Avoid High temperatures and ignition sources. Keep Away from materials which can burn.

### **Incompatible Materials**

This product is incompatible with amines, acids, organic materials, permanganates, cyanides, chlorates, iodides, Sulfates, Urea, and ammonium compounds. Incompatible with aminoguanidine salts, butadiene, phthalic acid, phthalic anhydride, reductants, sodium amide, Sodium Disulfate, Sodium Thiocyanate, Urea wood. Addition of Solid Nitrite to molten amide causes immediate gas evolution, followed by an explosion. Mixture of Sodium Nitrite and Sodium thiosuanate explodes on heating. Interaction of nitrites when



Print Date: November 8, 2018

heated with metal amino sulfates. (Sulfamates) may become explosively violent owing to liberation of nitrogen and steam. Mixtures with ammonium Sulfamate form ammonium nitrite which decomposes violently around 80 degrees C. Explosion occurs if an ammonium salt is melted with nitrite salt. When Sodium nitrite and thiosulfate mixtures was heated to evaporate to dryness, explosion occurred. Solutions of Potassium and Sodium Nitrite in liquid ammonia form disodium Nitrite, which is very reactive and easily Explosive. Lithium Reacts with Sodium Nitrite to form lithium Sodium hydronitrite, a compound which decomposes violently around 100-130 deg. C.

# **Hazardous Decomposition Products**

Upon Heating, Nitrogen Oxides and Oxygen are released, which increases potential of fire. In contact with all acids, Sodium Nitrite decomposes to form Nitrogen Oxides.

# Section 11: Toxicological Information

### Information on routes of exposure

**Ingestion:** May be fatal if swallowed.

Inhalation: Breathing dusts or particulates generated by this product can lead to irritation of the nose, throat or respiratory system.

**Skin Contact:** May cause irritation and possibly dermatitis.

Eye Contact: May cause irritation of the eyes.

### Information on Toxicological Effects

# Acute Toxicity (List all possible routes of exposure) Oral

Sodium Nitrite: LD50: Mouse 175 mg/kg Sodium Nitrite: LD50: Rat: 85 mg/kg

Sodium Nitrite: TDLo: Man: 1714 mg/kg 70 minutes

Sodium Nitrite: TDLo: Human 71 mg/kg Sodium Nitrite: TDLo: Human 14 mg/kg Sodium Nitrite: TDLo: Man: 321 mg/kg

Sodium Nitrite: TDLo: Man 1714 ug/kg/70 minutes

Sodium Nitrite: LDLo: Child 22 mg/kg Sodium Nitrite: TDLo: 6080 mg/kg

Sodium Nitrite: Rat: 22,500 mg/kg 90 days Continuous Sodium Nitrite: TDLo: Rat: 17,080 mg/kg 61 days continuous Sodium Nitrite: TDLo: Rat: 14477 mg/kg 26 weeks intermittent Sodium Nitrite: TDLo: Rat: 134 gm/kg/64 weeks continuous Sodium Nitrite: TDLo: Rat: 2190 g/kg 2 years continuous Sodium Nitrite: TDLo: 185 gm/kg/61 week continuous Sodium Nitrite: TD 63 g/kg 95 weeks continuous Sodium Nitrite: TD: Rat: 91 g/kg/2 years continuous Sodium Nitrite: TD: 183 g/kg 2 years continuous Sodium Nitrite: TD: 100 g/kg/2 years intermittent Sodium Nitrite: TD: 40 g/kg/56 weeks Continuous Sodium Nitrite: TD: Rat: 365 gm/kg/2 years intermittent

Sodium Nitrite: LDLo: Dog: 330 mg/kg Sodium Nitrite: LDLo: Cat: 1500 mg/kg Sodium Nitrite: LD50: Rabbit: 186 mg/kg

### Dermal

No data Available

### Inhalation

Sodium Nitrite: LC50: 5500 mg/m<sup>3</sup> Sodium Nitrite: TCLo: 125 ug/m<sup>3</sup> 22 weeks

Sodium Nitrite: TCLo: 300 ug/m3 /4 hours / 30 days intermittent

# Repeated Dose Toxicity

No data Available

# Skin Corrosion/Irritation

Product may be absorbed thru the skin. Prolonged or repeated contact with this product may cause irritation and possibly dermatitis. Skin may become flushed or turn blue.

### Serious Eye Damage/Eye Irritation

 $Exposure \ to \ particulates \ or \ solution \ of \ this \ product \ may \ cause \ irritation \ of \ the \ eyes \ with \ symptoms \ such \ as \ stinging, \ tearing, \ redness \ and \ pain.$ 

# Respiratory/Skin Sensitization

Breathing dusts or particulates generated by this product can lead to irritation o the nose, throat or respiratory system. Symptoms of such exposure could include coughing, sneezing, and chest discomfort.

### Carcinogenicity

## IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

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.

# US. National Toxicology Program (NTP) Report on Carcinogens

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.

## US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

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.

# **Germ Cell Mutagenicity**

In Vitro

Sodium Nitrite has tested positive in mammalian and non-mammalian in Vitro assays.



Print Date: November 8, 2018

In Vivo

No mutagenic components identified.

**Reproductive Toxicity** 

None known.

Specific Target Organ Toxicity – Single Exposure

None known.

Specific Target Organ Toxicity – Repeated Exposure

None known.

**Aspiration Hazard** 

Not classified.

Other Effects

None known.

# **Section 12: Ecological Information**

### **Ecotoxicity**

**Acute Hazards to the Aquatic Environment** 

Fish

Sodium Nitrite: LC50: Fish: 7.7 mg/l96 hours

**Aquatic Invertebrates** 

Sodium Nitrite: LC50: Daphnia: 12.5 mg/l 48 hours

**Toxicity to Aquatic Plants** 

No data available.

**Chronic Hazards to the Aquatic Environment** 

Fish

No data available.

**Aquatic Invertebrates** 

No data available.

**Toxicity to Aquatic Plants** 

No data available.

Persistence and Degradability

Biodegradation

There is no data on the degradability of this product.

**BOD/COD Ratio** 

No data available.

**Bioaccumulative Potential** 

**Bioconcentration Factor (BCF)** 

No data available on bioaccumulation.

Partition Coefficient n-octanol / water (log Kow)

No data available.

**Mobility in Soil** 

The product is watersoluble and may spread in water systems.

**Other Adverse Effects** 

No data available.

# **Section 13: Disposal Considerations**

### **Disposal Instructions**

All Wastes must be handled in accordance with local, state and federal regulations or with regulations of Canada and Its provinces. This product if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

# **Contaminated Packaging**

Handle contaminated packages in the same way as the substance itself. Emptied containers may retain hazardous residue and explosive vapors. Keep away from heat, sparks, and flames. Do not cut, puncture, or weld on or near this container. Follow label warnings until container is thoroughly cleaned or destroyed.

# **Section 14: Transportation Information**

US Department of Transportation (DOT)

UN Number: UN1500 UN Proper Shipping Name: Sodium nitrite Technical Name: -Hazard Class: 5.1



Print Date: November 8, 2018

Subsidiary Hazard Risk: 6.1

Packing Group: III

DOT Label/Placard Exemptions: Not determined

Special Provisions: A1, A29, IB8, IP3, T1, TP33

Packaging Exceptions: 49CFR 173.152 Packaging Non-Bulk: 49CFR 173.213

Packaging Bulk: 49CFR 173.240

Reportable Quantity (RQ): 100lb (45.4kg) Marine Pollutant: No

Poison Inhalation Hazard: No

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons

transporting the product know what to do in the event of an accident or spillage.

Emergency Response Guidebook (ERG) #: 140

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

# **Section 15: Regulatory Information**

# **US Federal Regulations**

#### Toxic Substance Control Act (TSCA), Chemical Substance Inventory, Section 8(b)

This product or ingredient(s) are listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

## Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substance List (40 CFR 302.4)

No chemical(s) in this material are subject to the reporting requirements of CERCLA.

### Clean Air Act (CAA), Section 112(r)

No chemical(s) in this material are subject to the reporting requirements of CAA.

#### Emergency Planning and Community Right-To-Know Act (EPCRA)

## **EPCRA 302 Extremely Hazardous Substance**

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **EPCRA 304 Emergency Response Notification**

No chemical(s) in this material are subject to the reporting requirements of SARA Title III, Section 304.

# **EPCRA 311/312 Emergency and Hazardous Materials Reporting**

Fire Hazard: Yes

Sudden Release of Pressure: No

Reactive: Yes

Acute (Immediate) Health Hazard: Yes

Chronic (Delayed) Health Hazard: No

### EPCRA 313 Toxic Chemical Release Inventory (TRI) Reporting

The following chemical(s) in this material are subject to reporting levels established by SARA Title III, Section 313: Sodium nitrite (CAS# 7632-00-0)

# **US State Regulations**

# California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65)

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

Important Note: Due to the changing nature of regulatory requirements, the information in this document should NOT be considered all-inclusive or authoritative. Users should make their own investigations to determine the suitability of the information for their particular purposes. International, Federal, State and Local regulations should be consulted to determine compliance with all required reporting requirements.

# **Section 16: Other Information**

# Hazardous Materials Identification System (HMIS®) Classification

**Health Hazard: 2** 

Chronic Health Hazard: / \*

Flammability: 0 **Physical Hazard: 1** 

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

# National Fire Protection Association (NFPA 704) Rating

**Health Hazard: 2** 

Fire Hazard: 0

**Reactivity Hazard:** 

## Special: N/A ₩ OX COR POI

(Hazard Rating: 0 – Minimal / 1 – Slight / 2 – Moderate / 3 – Serious / 4 – Severe)

Prepared By: Regulatory Manager

Version #: 001

Issue Date: June 5, 2015 Revision Date: November 8, 2018

Revisions: 1



Print Date: November 8, 2018

### **Key to Abbreviations and Acronyms**

ATE - Acute Toxicity Estimate BCF - Bioconcentration Factor EC50 - Effective concentration, 50%

IDHL – Immediately Dangerous to Life and Health

Kg – Kilogram I – Liter lb – Pound

LC50 - Lethal Concentration, 50%

LD50 - Lethal Dose, 50% mg - milligram ml – milliliter N/A – Not Applicable

N/D – Not Determined

PEL – Permissible Exposure Limit REL – Recommended Exposure Limit STEL – Short-term Exposure Limit TWA - Time weighted average

ACGIH - American Conference of Industrial Hygienists

AIHA – American Industrial Hygiene Association BEI - Biological Exposure Indices

CAS – Chemical Abstracts Service DOT – US Department of Transportation

EPA – US Environmental Protection Agency GHS - Globally Harmonized System of Classification and Labelling of Chemicals

IARC - International Agency for Research on Cancer IATA - International Air Transport Association

IBC - Intermediate Bulk Container

IMDG - International Maritime Dangerous Goods

NIOSH – National Institute for Occupational Safety and Health

NTP – National Toxicology Program

OSHA – US Occupational Health and Safety Administration SARA – US EPA Superfund Amendments and Reauthorization Act

TSCA – US EPA Toxic Substances Control Act

**UN - United Nations** 

#### References

HSDB®-Hazardous Substances Data Bank

### Disclaimer

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