



RPN-225 Detergent (7315)

Safety Data Sheet

Revision Date: 03/10/2021

Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture

Product Name: RPN-225 Detergent

Product Code: 7315

Synonyms: RPN-225 Detergent

Intended Use of the Product

Use of the Substance/Mixture: Nitrite-based liquid rust inhibitor used in conjunction with detergents LDN-225 and PDN-50 to ensure sufficient protection against corrosion. For professional use only.

Name, Address, and Telephone of the Responsible Party

Company

Better Engineering Mfg., Inc.

1802 Fashion Court

Joppa, Maryland 21085 USA

T: 800-229-3380

www.betterengineering.com

Emergency Telephone Number

Emergency number : 1-800-535-5053 (INFOTRAC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Oxidizing Liq. 2 H272

Oral Toxicity 3 H301

Skin Irritant 3 H316

Eye Irritant 2B H320

Inhalation 5 H333

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H272 – May intensify fire; oxidizer

H301 – Toxic if swallowed

H316 – Causes mild skin irritation

H320 – Causes eye irritation

H333 – May be harmful if inhaled

Precautionary Statements (GHS-US)

: 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

P261 – Avoid breathing dust/fume/gas/mist/vapors/spray

P264 – Wash thoroughly after handling

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

P271 – Use only outdoors or in a well-ventilated area

P280 – Wear protective gloves/protective clothing/eye protection/face protection

P301+P310 – If swallowed: immediately call a Poison Center or doctor/physician

P304+P312 – If inhaled: call a Poison Center or doctor/physician if you feel unwell

P304+P340 – If inhaled: remove victim to fresh air and keep at rest in a position comfortable for breathing

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Precautionary Statements (GHS-US) : P305+P351+P338 – If in eyes: Rinse cautiously with water for several minutes; remove contact lenses if present and easy to do; continue rinsing
P312 – Call a Poison Center or doctor/physician if you feel unwell
P321 – Specific treatment (see Section 4 on this label)
P330 – Rinse mouth
P332+P313 – If skin irritation occurs: get medical advice/attention
P337+P313 – If eye irritation persists: get medical advice/attention
P370+378 – In case of fire: use flooding amounts of water for extinction
P405 – Store locked up
P501 – Dispose of contents/container according to local, state, federal, provincial and international regulations.

Other Hazards

Other Hazards Not Contributing to the Classification:

Other Hazards: Toxic if swallowed or sodium nitrite dust is inhaled. Oxidizer. May ignite organic material and react with other materials. Can decompose if mixed with acids or exposed to fire conditions, releasing toxic nitrogen oxides.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Name	Product identifier	% (w/w)
Sodium nitrite	(CAS No) 7632-00-0	27
Sodium tetraborate pentahydrate OSHA PEL total dust: 15 mg/m ³ OSHA PEL respirable dust: 5 mg/m ³ ACGIH/TLV (TWA): 2 mg/m ³ TWA and 6 mg/m ³ STEL inhalable fraction Cal OSHA/PEL: 5 mg/m ³	(CAS No) 12179-04-3	Not Regulated

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Remove to fresh air and keep at rest in a position comfortable for breathing. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Skin Contact: Immediately flush skin with water while removing contaminated clothing and shoes. Seek medical attention if irritation persists. Wash clothing before reuse and discard contaminated shoes.

Eye Contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye(s). Call a poison control center or doctor for treatment advice.

Ingestion: Seek immediate medical attention. Do not induce vomiting. Vomiting will cause further damage to mouth and throat. If individual is conscious and alert, immediately rinse mouth with water and give milk or water to drink. If possible, do not leave the individual unattended.

Note To Physicians: Sodium nitrite forms methemoglobin in the blood stream. Treat accordingly.

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Most Important Symptoms and Effects Both Acute and Delayed

Inhalation: Harmful if inhaled, dependent on the extent of exposure. Under normal conditions, using adequate ventilation no problems are expected.

Skin Contact: Causes mild skin irritation.

Eye Contact: Causes eye irritation.

Ingestion: May irritate mouth, esophagus and stomach. Although small quantities are used in food preparation, swallowing moderate amounts of sodium nitrite can result in serious toxic effects including death. Effects include nausea, weakness, cyanosis (blue skin), collapse and coma, possibly leading to death. Sodium nitrite interferes with the blood's ability to transport oxygen.

Chronic (Cancer) Information: Not listed by IARC or NTP as a carcinogen.

Teratology (Birth Defect) Information: Not classified as a teratogen.

Reproduction Information: Does not harm reproductive cells.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use flooding amounts of water.

Unsuitable Extinguishing Media: Do not use dry chemicals containing ammonium phosphates.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Oxidizer. May ignite organic material and react with other materials.

Explosion Hazard: None known

Reactivity: Can decompose if mixed with acids or exposed to fire conditions, releasing toxic nitrogen oxides.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Follow NFPA Fire Protection Guidelines.

Hazardous Combustion Products: Oxides of carbon and nitrogen.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not allow product to spread into the environment. Do NOT breathe (dust, fumes). Do not get in eyes, on skin, or on clothing. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Avoid generating dust.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

Small Spill: Use appropriate containment to avoid run-off. Keep out of streams, sewers and waterways. Collect free material. Absorb remainder on inert absorbent. Wash area with plenty of water.

Large Spill: If possible, clean up spill area on a dry basis and then flush with plenty of water. Absorb liquid with vermiculite, floor absorbent or other absorbent material. Keep out of sewer, streams, ponds, lakes, or other waterways.

Methods and Material for Containment and Cleaning Up

For Containment: Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely. Use explosion proof vacuum during cleanup, with appropriate filter, do not mix with other materials. Contact competent authorities after a spill. Minimize generation of dust.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

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SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Keep away from heat, sparks or other sources of ignition.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wear appropriate personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do not eat, drink or smoke when using this product. Wash hands and forearms thoroughly after handling.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from incompatible materials. Store locked up.

Incompatible Materials: Oxidizers, reducers, heat, alkalies, acids, disinfectants, and bleach.

Special Rules on Packaging: Keep only in original container.

Specific End Use(s)

Nitrite-based liquid rust inhibitor

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

No Occupational Exposure Limits (OELs) have been established for this product or its chemical components.

Exposure Controls

Appropriate Engineering Controls: Use local and general exhaust ventilation to effectively remove and prevent buildup of mist/vapors/fumes generated from handling this product.

Personal Protective Equipment: Protective goggles. Protective clothing. Insufficient ventilation: wear respiratory protection. Gloves. Face shield.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant, impervious, protective gloves.

Eye Protection: Wear safety glasses as minimum eye protection. Conditions may warrant the use of chemical goggles.

Skin and Body Protection: Wear safety apron if there is a chance of skin contact with product.

Respiratory Protection: None normally needed.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Appearance	: Clear, liquid
Odor	: Not available
Odor Threshold	: Not available
pH	: 8-9
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: None
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available

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Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Specific Gravity	: 1.199
Solubility in Water	: Soluble
Partition coefficient: n-octanol/water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not available
Explosion Data – Sensitivity to Static Discharge	: Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Oxidizer. May ignite organic material and react with other materials. Can decompose if mixed with acids or exposed to fire conditions, releasing toxic nitrogen oxides.

Chemical Stability: Stable

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Incompatible materials.

Incompatible Materials: Oxidizers, reducers, heat, alkalies, acids, disinfectants, and bleach.

Hazardous Decomposition Products: Oxides of carbon and nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: No information available

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: No information available

Teratogenicity: Not a teratogen

Carcinogenicity: Not classified as a carcinogen

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Fetal toxicity has been demonstrated in pregnant animals fed toxic doses of sodium nitrite. This is due to the formation of methemoglobin.

Specific Target Organ Toxicity (Single Exposure): No information available

Aspiration Hazard: No information available

Symptoms/Injuries After Inhalation: May be harmful if inhaled.

Symptoms/Injuries After Skin Contact: Causes mild skin irritation.

Symptoms/Injuries After Eye Contact: Causes eye irritation.

Symptoms/Injuries After Ingestion: Toxic if swallowed.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information: No information available

Chemical Fate Information: No information available

Mobility in Soil: Not available

Other Adverse Effects: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material and empty containers in accordance with all local, state, regional, national, provincial, territorial and international regulations by a licensed disposal agent.

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SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S. (CONTAINS SODIUM NITRITE)
Hazard Class : 5.1
Identification Number : UN3219
Label Codes : 5.1, Regulated as a "LIMITED QUANTITY" under 1.3 gallons
Packing Group : III
ERG : 140

14.2 In Accordance with IMDG

Proper Shipping Name : NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S. (CONTAINS SODIUM NITRITE)
Hazard Class : 5.1
Identification Number : UN3219
Packing Group : III
Label Codes : 5.1, Regulated as a "LIMITED QUANTITY" under 1.3 gallons
EmS-No. (Fire) :
EmS-No. (Spillage) :

14.3 In Accordance with IATA

Proper Shipping Name : NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S. (CONTAINS SODIUM NITRITE)
Packing Group : III
Identification Number : UN3219
Hazard Class : 5.1
Label Codes : 5.1, Regulated as a "LIMITED QUANTITY" under 1.3 gallons
ERG Code (IATA) :

14.4 In Accordance with TDG

Proper Shipping Name : NITRITES, INORGANIC, AQUEOUS SOLUTION, N.O.S. (CONTAINS SODIUM NITRITE)
Packing Group : III
Hazard Class : 5.1
Identification Number : UN3219
Label Codes : 5.1, Regulated as a "LIMITED QUANTITY" under 1.3 gallons

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

OSHA	Occupational Safety and Health Administration (OSHA) 29 CFR 1910.1200 Hazcom Standard
CERCLA: SARA HAZARD CATEGORY:	Immediate, Fire, Reactivity Section 313: Yes

US State Regulations

No information available.	
Volatile Organic Compounds:	No information available.

Canadian Regulations

WHMIS Classification	Class C – Oxidizing Material Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Canadian Environmental Protection Act (CEPA)	No information available
EINECS:	No information available

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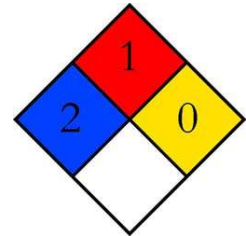
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SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision date: 03/10/2021

Other Information: *Information in this Safety Data Sheet (SDS) is based on sources other than direct test data and is given in good faith. No warranty is expressed or implied. We believe that the information is current as of the date of this SDS. The use of this information, the conditions, the methods of handling, storage, use and disposal of the product are not within the control of the manufacturer and distributor, therefore it is the user's responsibility and obligation to determine the conditions of the safe use of this product and to ensure that its activities comply with all laws and regulations.*

NFPA Health Hazard	: 2 - Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury.
NFPA Fire Hazard	: 1 - Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur.
NFPA Reactivity	: 0 - Normally stable, even under fire exposure conditions, and is not reactive with water.



HMIS III Rating

Health	: 2 Moderate Hazard: Moderately Toxic – May be harmful if inhaled or absorbed
Flammability	: 1 Slight Hazard: Slightly Combustible – Required strong heating to ignite
Reactivity	: 0 Minimal Hazard: Normally Stable; does not react with water
Protective Equipment	: X: Ask you supervisor for special handling instructions

Party Responsible for the Preparation of This Document

Better Engineering Mfg., Inc.
1802 Fashion Court
Joppa, Maryland 21085 USA
T: 800-229-3380

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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