



Be Right™

SAFETY DATA SHEET

Issue Date 13-Nov-2019

Revision Date
19-Nov-2019

Version 1.6

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1. IDENTIFICATION

Product identifier

Product Name Nitrate LR TNT Reagent Vial

Other means of identification

Product Code(s) TNT835R

Safety data sheet number M01749

UN/ID no UN3316

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent. Determination of nitrate.

Uses advised against Consumer use.

Restrictions on use For Laboratory Use Only.

Details of the supplier of the safety data sheet

Manufacturer Address

Hach Company P.O.Box 389 Loveland, CO 80539 USA +1(970) 669-3050

Emergency telephone number

+1(303) 623-5716 - 24 Hour Service

2. HAZARDS IDENTIFICATION

Classification

Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

| | |
|-----------------------------------|------------|
| Corrosive to metals | Category 1 |
| Skin corrosion/irritation | Category 1 |
| Serious eye damage/eye irritation | Category 1 |

Hazards not otherwise classified (HNOC)

Data insufficient for GHS classification but significant enough for mention suggests:

CANCER HAZARD. STRONG INORGANIC ACID MISTS CONTAINING SULFURIC ACID CAN CAUSE CANCER.

Inhalation of low concentrations of sulfuric acid may result in airway irritation such as cough and shortness of breath; high concentrations may result in acute effects such as cough.

Label elements

Signal word

Danger

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Hazard statements

H290 - May be corrosive to metals
H314 - Causes severe skin burns and eye damage

Precautionary statements

P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor/physician
P363 - Wash contaminated clothing before reuse
P405 - Store locked up
P501 - Dispose of contents/ container to an approved waste disposal plant
P234 - Keep only in original container
P390 - Absorb spillage to prevent material damage

Other Hazards Known

Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Family
Chemical nature

Mixture.
Aqueous solution of inorganic acid.

Percent ranges are used where confidential product information is applicable.

| Chemical name | CAS No. | Percent Range | HMRIC # |
|-----------------|-----------|---------------|---------|
| Sulfuric acid | 7664-93-9 | 50 - 60% | - |
| Phosphoric acid | 7664-38-2 | 30 - 40% | - |

4. FIRST AID MEASURES

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Inhalation

Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

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advice/attention.

Eye contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.

Skin contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Get immediate medical advice/attention.

Self-protection of the first aider

Avoid contact with skin, eyes or clothing. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

Symptoms

Burning sensation.

Indication of any immediate medical attention and special treatment needed

Note to physicians

Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous combustion products

This material will not burn.

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

U.S. Notice

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

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Other Information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|------------------------------------|---|---|---|
| Sulfuric acid CAS#: 7664-93-9 | TWA: 0.2 mg/m ³ thoracic particulate matter | TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ | IDLH: 15 mg/m ³ TWA: 1 mg/m ³ |
| Phosphoric acid CAS#: 7664-38-2 | STEL: 3 mg/m ³ TWA: 1 mg/m ³ | TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³ (vacated) STEL: 3 mg/m ³ | IDLH: 1000 mg/m ³ TWA: 1 mg/m ³ STEL: 3 mg/m ³ |

Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

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| | |
|--|---|
| Hand Protection | Wear suitable gloves. Impervious gloves. |
| Eye/face protection | Face protection shield. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. |
| General Hygiene Considerations | Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. |
| Environmental exposure controls | Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water. |
| Thermal hazards | None under normal processing. |

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|------------------|-----------------------|-------------------|
| Physical state | Liquid | Color | colorless |
| Appearance | aqueous solution | Odor threshold | No data available |
| Odor | Acidic | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|----------------------------------|-------------------------|
| Molecular weight | No data available | |
| pH | < 1 | @ 20 °C |
| Melting point/freezing point | ~ -4 °C / 24.8 °F | |
| Boiling point / boiling range | ~ 101 °C / 213.8 °F | |
| Evaporation rate | 0 (water = 1) | |
| Vapor pressure | 0 mm Hg / 0 kPa at 20 °C / 68 °F | |
| Vapor density (air = 1) | No data available | |
| Specific gravity (water = 1 / air = 1) | 1.78 | |
| Partition Coefficient (n-octanol/water) | Not applicable | |
| Soil Organic Carbon-Water Partition Coefficient | Not applicable | |
| Autoignition temperature | No data available | |
| Decomposition temperature | No data available | |
| Dynamic viscosity | No data available | |
| Kinematic viscosity | No data available | |

Solubility(ies)

Water solubility

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| | | |
|--|-------------------------|-------------------------------------|
| <u>Water solubility classification</u> | <u>Water solubility</u> | <u>Water Solubility Temperature</u> |
| Completely soluble | > 10000 mg/L | 20 °C / 68 °F |

Solubility in other solvents

| | | | |
|----------------------|----------------------------------|-------------------|-------------------------------|
| <u>Chemical Name</u> | <u>Solubility classification</u> | <u>Solubility</u> | <u>Solubility Temperature</u> |
| None reported | No information available | No data available | No information available |

Other Information

Metal Corrosivity

Classified as corrosive to metal according to GHS criteria

Steel Corrosion Rate

No data available

Aluminum Corrosion Rate

No data available

Volatile Organic Compounds (VOC) Content

| Chemical name | CAS No. | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|-----------------|-----------|--|---------------------|
| Sulfuric acid | 7664-93-9 | No data available | - |
| Phosphoric acid | 7664-38-2 | Not applicable | - |

Explosive properties

Upper explosion limit

No data available

Lower explosion limit

No data available

Flammable properties

Flash point

No data available

Flammability Limit in Air

Upper flammability limit

No data available

Lower flammability limit

No data available

Oxidizing properties

No data available.

Bulk density

No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Possibility of Hazardous Reactions

None under normal processing.

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Hazardous polymerization

None under normal processing.

Conditions to avoid

Exposure to air or moisture over prolonged periods.

Incompatible materials

Oxidizing agent. Acids. Bases.

Hazardous Decomposition Products

Sulfur oxides. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation

Corrosive by inhalation. Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal.

Eye contact

Causes burns. Corrosive to the eyes and may cause severe damage including blindness. Causes serious eye damage. May cause irreversible damage to eyes.

Skin contact

Corrosive. Causes severe burns. Avoid contact with skin and clothing.

Ingestion

Causes burns. Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms

Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Acute toxicity

Based on available data, the classification criteria are not met

Product Acute Toxicity Data

No data available.

Ingredient Acute Toxicity Data

No data available.

Unknown Acute Toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

Acute Toxicity Estimations (ATE)

| | |
|-------------------------------|--------------------------|
| ATEmix (oral) | No information available |
| ATEmix (dermal) | No information available |
| ATEmix (inhalation-dust/mist) | No information available |
| ATEmix (inhalation-vapor) | No information available |
| ATEmix (inhalation-gas) | No information available |

Skin corrosion/irritation

Causes severe burns.

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Product Skin Corrosion/Irritation Data
No data available.

Ingredient Skin Corrosion/Irritation Data
Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|---------------------------|---------|---------------|---------------|-------------------|--|
| Sulfuric acid (50 - 60%) CAS#: 7664-93-9 | Existing human experience | Human | None reported | None reported | Corrosive to skin | HSDB (Hazardous Substances Data Bank) |
| Phosphoric acid (30 - 40%) CAS#: 7664-38-2 | Standard Draize Test | Rabbit | 800 mg | None reported | Corrosive to skin | ECHA (The European Chemicals Agency) |

Serious eye damage/irritation

Classification based on data available for ingredients. Causes burns. Risk of serious damage to eyes.

Product Serious Eye Damage/Eye Irritation Data
No data available.

Ingredient Eye Damage/Eye Irritation Data
Test data reported below.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|---------------------------|---------|---------------|---------------|-------------------|--|
| Sulfuric acid (50 - 60%) CAS#: 7664-93-9 | Existing human experience | Human | None reported | None reported | Corrosive to eyes | HSDB (Hazardous Substances Data Bank) |
| Phosphoric acid (30 - 40%) CAS#: 7664-38-2 | Standard Draize Test | Rabbit | 199 mg | None reported | Corrosive to eyes | RTECS (Registry of Toxic Effects of Chemical Substances) |

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Product Sensitization Data
No data available.

Ingredient Sensitization Data
No data available.

STOT - single exposure

Based on available data, the classification criteria are not met.

Product Specific Target Organ Toxicity Single Exposure Data
No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data
Test data reported below.

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--------------------------|------------------------|---------------|---------------|-------------------------------|--|
| Sulfuric acid (50 - 60%) | Human TD _{Lo} | 0.144 mg/L | 5 minutes | Lungs, Thorax, or Respiration | RTECS (Registry of Toxic Effects of Chemical |

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| | | | | | |
|-----------------|--|--|--|---------|-------------|
| CAS#: 7664-93-9 | | | | Dyspnea | Substances) |
|-----------------|--|--|--|---------|-------------|

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Product Specific Target Organ Toxicity Repeat Dose Data

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Test data reported below.

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|------------------------|---------------|---------------|---|--|
| Sulfuric acid (50 - 60%) CAS#: 7664-93-9 | Human TC _{Lo} | 0.003 mg/L | 168 days | Musculoskeletal Changes in teeth and supporting structures | RTECS (Registry of Toxic Effects of Chemical Substances) |

Carcinogenicity

Based on available data, the classification criteria are not met.

Product Carcinogenicity Data

No data available.

Ingredient Carcinogenicity Data

No data available.

| Chemical name | CAS No. | ACGIH | IARC | NTP | OSHA |
|-----------------|-----------|-------|---------|-------|------|
| Sulfuric acid | 7664-93-9 | A2 | Group 1 | Known | X |
| Phosphoric acid | 7664-38-2 | - | - | - | - |

Legend

| | |
|--|----------------------------------|
| ACGIH (American Conference of Governmental Industrial Hygienists) | A2 - Suspected Human Carcinogen |
| IARC (International Agency for Research on Cancer) | Group 1 - Carcinogenic to Humans |
| NTP (National Toxicology Program) | Known - Known Carcinogen |
| OSHA (Occupational Safety and Health Administration of the US Department of Labor) | X - Present |

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Product Germ Cell Mutagenicity *invitro* Data

No data available.

Ingredient Germ Cell Mutagenicity *invitro* Data

Test data reported below.

| Chemical name | Test | Cell Strain | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|----------------------------|-------------------------------|---------------|---------------|---------------------------------------|--|
| Sulfuric acid (50 - 60%) CAS#: 7664-93-9 | Cytogenetic analysis | Hamster ovary | 4 mmol/L | None reported | Positive test result for mutagenicity | No information available |
| Phosphoric acid (30 - 40%) CAS#: 7664-38-2 | Mutation in microorganisms | <i>Salmonella typhimurium</i> | 5 mg/plate | 3 days | Negative test result for mutagenicity | ECHA (The European Chemicals Agency) |

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Product Germ Cell Mutagenicity *in vivo* Data
No data available.

Ingredient Germ Cell Mutagenicity *in vivo* Data
No data available.

Reproductive toxicity
Based on available data, the classification criteria are not met.

Product Reproductive Toxicity Data
No data available.

Ingredient Reproductive Toxicity Data
Test data reported below.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|---------------|---------------|---------------|---|--|
| Phosphoric acid (30 - 40%) CAS#: 7664-38-2 | Rat NOAEL | >= 500 mg/kg | 6 weeks | No reproductive or developmental toxic effects observed | ECHA (The European Chemicals Agency) |

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|----------------------------|---------------|---------------|--|--|
| Sulfuric acid (50 - 60%) CAS#: 7664-93-9 | Rabbit TC _{Lo} | 0.02 mg/L | 7 hours | Specific Developmental Abnormalities Musculoskeletal system | RTECS (Registry of Toxic Effects of Chemical Substances) |

Aspiration hazard
Based on available data, the classification criteria are not met.

12. ECOLOGICAL INFORMATION

Ecotoxicity Based on available data, the classification criteria are not met.

Unknown aquatic toxicity 0% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Product Ecological Data

Aquatic Acute Toxicity
No data available.

Aquatic Chronic Toxicity
No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity
No data available.

Aquatic Chronic Toxicity
No data available.

Persistence and degradability

Product Biodegradability Data

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No data available.

Bioaccumulation

Product Bioaccumulation Data
No data available.

Partition Coefficient (n-octanol/water) Not applicable

Mobility

Soil Organic Carbon-Water Partition Coefficient Not applicable

Other adverse effects
No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

US EPA Waste Number D002

Special instructions for disposal Dilute to 3 to 5 times the volume with cold water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

14. TRANSPORT INFORMATION

DOT

| | |
|--|-------------------------|
| UN/ID no | UN3316 |
| Proper shipping name | CHEMICAL KIT |
| Hazard Class | 9 |
| Description | UN3316, CHEMICAL KIT, 9 |
| Emergency Response Guide Number | 171 |

TDG

| | |
|-----------------------------|-------------------------|
| UN/ID no | UN3316 |
| Proper shipping name | CHEMICAL KIT |
| Hazard Class | 9 |
| Description | UN3316, CHEMICAL KIT, 9 |

IATA

| | |
|-------------------------------------|-------------------------|
| UN/ID no | UN3316 |
| Proper shipping name | Chemical kit |
| Hazard Class | 9 |
| Packing Group | II |
| ERG Code | 9L |
| Special precautions for user | A3, A803 |
| Description | UN3316, Chemical kit, 9 |

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IMDG

| | |
|-------------------------------------|-------------------------|
| UN/ID no | UN3316 |
| Proper shipping name | CHEMICAL KIT |
| Hazard Class | 9 |
| EmS-No | F-A, S-P |
| Special precautions for user | 251, 340 |
| Description | UN3316, CHEMICAL KIT, 9 |

Additional information

This product forms part of a kit. Information in this section relates to the kit as a whole.

15. REGULATORY INFORMATION

National Inventories

| | |
|-----------------|----------|
| TSCA | Complies |
| DSL/NDSL | Complies |

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories

| | |
|----------------------|----------|
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| TCSI | Complies |
| AICS | Complies |
| NZIoC | Complies |

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name | SARA 313 - Threshold Values % |
|----------------------------------|-------------------------------|
| Sulfuric acid (CAS #: 7664-93-9) | 1.0 |

SARA 311/312 Hazard Categories

| | |
|--|-----|
| Acute health hazard | Yes |
| Chronic Health Hazard | Yes |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

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| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Sulfuric acid 7664-93-9 | 1000 lb | - | - | X |
| Phosphoric acid 7664-38-2 | 5000 lb | - | - | X |

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

| Chemical name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|------------------------------|--------------------------|----------------|--|
| Sulfuric acid 7664-93-9 | 1000 lb | 1000 lb | RQ 1000 lb final RQ RQ 454 kg final RQ |
| Phosphoric acid 7664-38-2 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |

U.S. - DEA (Drug Enforcement Administration) List I & List II

| Chemical name | U.S. - DEA (Drug Enforcement Administration) - List I or Precursor Chemicals | U.S. - DEA (Drug Enforcement Administration) - List II or Essential Chemicals |
|--|--|--|
| Sulfuric acid (50 - 60%) CAS#: 7664-93-9 | Not Listed | 50 gallon Export Volume (exports, transshipments and international transactions to designated countries) |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical name | California Proposition 65 |
|----------------------------------|---------------------------|
| Sulfuric acid (CAS #: 7664-93-9) | Carcinogen |



WARNING: This product can expose you to chemicals including Sulfuric acid, which is known to the State of California to cause cancer.

For more information, go to <http://www.P65Warnings.ca.gov>

IMERC: Not applicable

U.S. State Right-to-Know Regulations

This product may contain substances regulated by state right-to-know regulations.

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|------------------------------|------------|---------------|--------------|
| Sulfuric acid 7664-93-9 | X | X | X |
| Phosphoric acid 7664-38-2 | X | X | X |

U.S. EPA Label Information

| Chemical name | FIFRA | FDA |
|-----------------|----------|-----------------|
| Sulfuric acid | 180.0910 | 21 CFR 184.1095 |
| Phosphoric acid | 180.0910 | 21 CFR 182.1073 |

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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

Not applicable

NFPA and HMIS Classifications

| | | | | |
|------|--------------------|------------------|----------------------|------------------------------------|
| NFPA | Health hazards - 3 | Flammability - 0 | Instability - 0 | Physical and chemical properties - |
| HMIS | Health hazards - 3 | Flammability - 0 | Physical hazards - 0 | Personal protection - X |

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH Immediately Dangerous to Life or Health
ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)
NDF no data

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

| | | | |
|------|---------------------------------|---------|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| MAC | Maximum Allowable Concentration | Ceiling | Ceiling Limit Value |
| X | Listed | Vacated | These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations. |
| SKN* | Skin designation | SKN+ | Skin sensitization |
| RSP+ | Respiratory sensitization | ** | Hazard Designation |
| C | Carcinogen | R | Reproductive toxicant |
| M | mutagen | | |

Prepared By Hach Product Compliance Department
Issue Date 13-Nov-2019
Revision Date 19-Nov-2019
Revision Note None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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End of Safety Data Sheet