

SAFETY DATA SHEET

Issue Date 01-Nov-2018 Revision Date 20-Sep-2022 Version 2.4

1. IDENTIFICATION

Product identifier

Product Name Nitrogen LR TNT Reagent D

Other means of identification

Product Code(s) TNT826D

Safety data sheet number M01920

UN/ID no UN3316

Recommended use of the chemical and restrictions on use

Recommended Use Determination of nitrate

Uses advised against Consumer use

Details of the supplier of the safety data sheet

Initial Supplier Identifier

Hach Sales & Service LP. 3020 Gore Road, London, Ontario N5V 4T7 Canada Tel: 1-800-665-7635

Manufacturer Address

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

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

CANUTEC 613-992-4624

2. HAZARD IDENTIFICATION

Classification

| Flammable liquids | Category 3 |
|--|-------------|
| Serious eye damage/eye irritation | Category 2A |
| Specific target organ toxicity (single exposure) | Category 3 |

Label elements

Signal word - Warning

Hazard statements

H226 - Flammable liquid and vapor H319 - Causes serious eye irritation

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H336 - May cause drowsiness or dizziness



Precautionary Statements

P280 - Wear protective gloves, protective clothing, eye protection, and face protection

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

P337 + P313 - If eye irritation persists: Get medical attention

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

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

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P312 - Call a POISON CENTER or doctor if you feel unwell

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/ container to an approved waste disposal plant

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P240 - Ground and bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

P303 + P361 + P353 - IF ON SKIN (or hair). Take off immediately all contaminated clothing. Rinse skin with water [or shower]

P403 + P235 - Store in a well-ventilated place. Keep cool

Unknown Acute Toxicity

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

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

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

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Other Hazards Known

Causes mild skin irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

Chemical Family Mixture.

Chemical nature Aqueous solution of organic and inorganic salts.

| Chemical name | Synonyms | CAS No | Percent Range | CBI Protection | Units | HMIRA# |
|---------------|----------|--------|---------------|----------------|-------|--------|
| | | | | | | |

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| Isopropyl alcohol | Isopropanol | 67-63-0 | 20 - 30% | - | g | - |
|--------------------|--------------------------|----------|----------|---|---|---|
| 2,6-Dimethylphenol | No information available | 576-26-1 | <1% | - | g | - |
| Isoamyl acetate | No information available | 123-92-2 | <1% | - | g | - |

4. FIRST AID MEASURES

Description of first aid measures

Show this safety data sheet to the doctor in attendance. **General advice**

Inhalation IF exposed or concerned: Get medical advice/attention. Remove to fresh air.

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes.

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth Ingestion

to an unconscious person. Do NOT induce vomiting. Call a physician.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

> involved, take precautions to protect themselves and prevent spread of contamination. Use personal protective equipment as required. See section 8 for more information. Avoid

contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

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

Specific hazards arising from the

chemical

Risk of ignition. Keep product and empty container away from heat and sources of ignition.

In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Hazardous combustion products Carbon monoxide. Carbon dioxide.

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

Personal precautions, protective equipment and emergency procedures

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WHMIS Notice Only persons properly qualified to respond to an emergency involving hazardous

substances should respond to a spill involving chemicals. See Section 13, Special

Instructions for disposal assistance.

Personal precautions See section 8 for more information. Keep people away from and upwind of spill/leak.

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

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

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if

safe to do so. Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor

suppressing foam may be used to reduce vapors. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other

non-combustible material and transfer to containers for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up

mechanically, placing in appropriate containers for disposal.

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

7. HANDLING AND STORAGE

Precautions for safe handling

heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. In case of insufficient ventilation, wear

suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric

motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Keep containers tightly closed in a dry, cool and well-ventilated place. Store in accordance with particular national

and local regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

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Exposure Limits

| Chemical name | Alberta OEL | British Columbia OEL | Manitoba OEL | New Brunswick OEL | New Foundland & Labrador OEL |
|-------------------------------|--|-------------------------------|-------------------------------|---|-------------------------------|
| Isopropyl alcohol 20 - 30% | TWA: 200 ppm TWA: 492 mg/m ³ STEL: 400 ppm STEL: 984 mg/m ³ | TWA: 200 ppm STEL: 400 ppm | TWA: 200 ppm STEL: 400 ppm | TWA: 400 ppm TWA: 983 mg/m³ STEL: 500 ppm STEL: 1230 mg/m³ | TWA: 200 ppm STEL: 400 ppm |
| 2,6-Dimethylphenol <1% | NDF | NDF | TWA: 1 ppm | NDF | TWA: 1 ppm SKN+ |
| Isoamyl acetate <1% | TWA: 50 ppm TWA: 266 mg/m ³ STEL: 100 ppm STEL: 532 mg/m ³ | TWA: 50 ppm STEL: 100 ppm | TWA: 50 ppm STEL: 100 ppm | TWA: 100 ppm TWA: 532 mg/m ³ | TWA: 50 ppm STEL: 100 ppm |

| Chemical name | Northwest | Nova Scotia OEL | Nunavut OEL | Ontario TWA | Prince Edward |
|--------------------|-----------------|-----------------|---------------|---------------|---------------|
| | Territories OEL | | | | Island OEL |
| Isopropyl alcohol | TWA: 200 ppm | STEL: 400 ppm | TWA: 200 ppm | TWA: 200 ppm | STEL: 400 ppm |
| 20 - 30% | STEL: 400 ppm | TWA: 200 ppm | STEL: 400 ppm | STEL: 400 ppm | TWA: 200 ppm |
| 2,6-Dimethylphenol | NDF | TWA: 1 ppm | NDF | NDF | TWA: 1 ppm |
| <1% | | SKN+ | | | |
| Isoamyl acetate | TWA: 50 ppm | STEL: 100 ppm | TWA: 50 ppm | TWA: 50 ppm | STEL: 100 ppm |
| <1% | STEL: 100 ppm | TWA: 50 ppm | STEL: 100 ppm | STEL: 100 ppm | TWA: 50 ppm |

| Chemical name | Quebec OEL | Saskatchewan OEL | Yukon OEL |
|-------------------|------------------------------|------------------|------------------------------|
| Isopropyl alcohol | TWA: 400 ppm | TWA: 200 ppm | STEL: 500 ppm |
| 20 - 30% | TWA: 985 mg/m ³ | STEL: 400 ppm | STEL: 1225 mg/m ³ |
| | STEL: 500 ppm | | TWA: 400 ppm |
| | STEL: 1230 mg/m ³ | | TWA: 980 mg/m ³ |
| | | | SKN* |
| Isoamyl acetate | TWA: 50 ppm | TWA: 50 ppm | STEL: 125 ppm |
| <1% | STEL: 100 ppm | STEL: 100 ppm | STEL: 655 mg/m ³ |
| | | | TWA: 100 ppm |
| | | | TWA: 525 mg/m ³ |

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|--------------------|----------------------|--|------------------------------|
| Isopropyl alcohol | STEL: 400 ppm | TWA: 400 ppm | IDLH: 2000 ppm |
| 20 - 30% | TWA: 200 ppm | TWA: 980 mg/m ³ | TWA: 400 ppm |
| | | (vacated) TWA: 400 ppm | TWA: 980 mg/m ³ |
| | | (vacated) TWA: 980 mg/m ³ | STEL: 500 ppm |
| | | (vacated) STEL: 500 ppm | STEL: 1225 mg/m ³ |
| | | (vacated) STEL: 1225 mg/m ³ | _ |
| 2,6-Dimethylphenol | TWA: 1 ppm inhalable | NDF | NDF |
| <1% | fraction and vapor | | |
| Isoamyl acetate | STEL: 100 ppm | TWA: 100 ppm | IDLH: 1000 ppm |
| <1% | TWA: 50 ppm | TWA: 525 mg/m ³ | TWA: 100 ppm |
| | | (vacated) TWA: 100 ppm | TWA: 525 mg/m ³ |
| | | (vacated) TWA: 525 mg/m ³ | _ |

Legend See section 16 for terms and abbreviations

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 Impervious gloves. Wear suitable gloves.

Eye/face protection Tight sealing safety goggles.

Skin and body protection Long sleeved clothing. Chemical resistant apron. Antistatic boots. Wear suitable protective

clothing. Avoid contact with eyes, skin and clothing.

General Hygiene Considerations Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of

equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this 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

Appearance aqueous solution Color colorless

Odor Aromatic Odor threshold No data available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Molecular weight No data available

pH 6 @ 20 °C

Melting point / freezing point \sim -3 °C / 26.6 °F

Initial boiling point and boiling range 82 °C / 179.6 °F

Evaporation rate 1.03 (water = 1)

Vapor pressure 22.052 mm Hg / 2.94 kPa at 25 °C / 77 °F

Relative vapor density 0.73

Specific gravity - VALUE 1 0.95

Partition coefficient 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

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

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Solubility in other solvents

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

Other information

Metal Corrosivity

Steel Corrosion RateNo data availableAluminum Corrosion RateNo data available

Volatile Organic Compounds (VOC) Content

See ingredients information below

| Chemical name | CAS No | Volatile organic compounds (VOC) content | CAA (Clean Air Act) |
|--------------------|----------|--|---------------------|
| Isopropyl alcohol | 67-63-0 | 100% | Χ |
| 2,6-Dimethylphenol | 576-26-1 | No data available | - |
| Isoamyl acetate | 123-92-2 | No data available | Χ |

Explosive properties

Upper explosion limitNo data availableLower explosion limitNo data available

Flammable properties

 Flash point
 26 °C / 78.8 °F

 Method
 DIN 51755 Part 1

Flammability Limit in Air

Upper flammability limit:No data availableLower flammability limit:No data available

Oxidizing properties No data available.

Bulk density No data available

10. STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge Yes.

Possibility of hazardous reactions

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization

None under normal processing.

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Conditions to avoid

Conditions to avoid Heat, flames and sparks.

Incompatible materials

Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation May cause irritation of respiratory tract. May cause drowsiness or dizziness.

Eye contact Causes serious eye irritation. May cause redness, itching, and pain.

Skin contact May cause irritation. Prolonged contact may cause redness and irritation.

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms May cause redness and tearing of the eyes. Inhalation of high vapor concentrations may

cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

No data available.

Ingredient Acute 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 |
|--|---------------|---------------|---------------|---|---|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | Rat LD₅o | 4710 mg/kg | None reported | Behavioral General anesthetic | OECD 429: Skin Sensitization: Local Lymph Node Assay |
| 2,6-Dimethylphenol (<1%) CAS#: 576-26-1 | Rat LD50 | 296 mg/kg | None reported | None reported | LOLI |
| Isoamyl acetate (<1%) CAS#: 123-92-2 | Rat LD50 | 16600 mg/kg | None reported | None reported | RTECS |

Dermal Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|----------------------------|---------------|---------------|-----------------------|--|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | Rabbit LD ₅₀ | 4059 mg/kg | None reported | None reported | LOLI |
| 2,6-Dimethylphenol (<1%) CAS#: 576-26-1 | Rabbit LD ₅₀ | 1000 mg/kg | None reported | None reported | LOLI |

Inhalation (Dust/Mist) Exposure Route

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| ure references and | Key literature referen | Toxicological effects | Exposure | Reported | Endpoint | Chemical name |
|--------------------|------------------------|---|----------|-----------|-------------|--|
| ces for data | sources for dat | | time | dose | type | |
| RTECS | RTECS | Behavioral General anesthetic Lungs, Thorax, or Respiration | 4 hours | 72.6 mg/L | Rat LC₅o | Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 |
| | | General anesthetic Lungs, Thorax, or | | | Rat | (20 - 30%) |

Unknown Acute Toxicity

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

- 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

| ATEmix (oral) | 15,362.70 |
|-------------------------------|--------------------------|
| 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

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

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 |
|--|--|---------|------------------|------------------|--------------------|--|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | Standard Draize Test | Rabbit | 500 mg | None reported | Mild skin irritant | RTECS |
| 2,6-Dimethylphenol (<1%) CAS#: 576-26-1 | OECD Test 404: Acute Dermal Corrosion/Irritation | Rabbit | 500 mg | 24 hours | Corrosive to skin | ECHA |

Serious eye damage/eye irritation

Classification based on data available for ingredients. Irritating to eyes.

Mixture

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 |
|--|-------------------------|---------|------------------|------------------|-------------------|--|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | Standard Draize Test | Rabbit | 100 mg | None reported | Corrosive to eyes | RTECS |
| Isoamyl acetate | Standard Draize | Rabbit | None reported | None reported | Eye irritant | ERMA |

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| | _ | 1 | | |
|-----------------|------|---|--|-----|
| (<1%) | Test | | | |
| \ '-'/ | | | | |
| CAS#: 123-92-2 | | | | |
| 0710m. 120 02 2 | | | | · · |

Respiratory or skin sensitization

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

Mixture

No data available.

Ingredient Sensitization Data

Test data reported below.

Skin Sensitization Exposure Route

| Chemical name | Test method | Species | Results | Key literature references and |
|--|---------------|------------|---------------------------------------|---|
| | | | | sources for data |
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | None reported | Guinea pig | Not confirmed to be a skin sensitizer | OECD 429: Skin Sensitization: Local Lymph Node Assay |

STOT - single exposure

May cause drowsiness or dizziness.

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure 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 |
|--|------------------|---------------|---------------|--|--|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | Human TD⊾₀ | 223 mg/kg | None reported | Behavioral Hallucinations, Distorted perceptions Cardiac Pulse rate decrease with fall in BP | RTECS |
| | | | | Vascular BP lowering not characterized in | |
| | | | | autonomic section | |

Inhalation (Vapor) Exposure Route

| Chemical r | name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|------|------------------|---------------|---------------|---|--|
| Isopropyl al (20 - 30° CAS#: 67- | %) | Human TC∟∘ | 35 mg/L | 4 hours | Cardiac Pulse rate decrease with fall in BP Lungs, Thorax, or Respiration Other changes | RTECS |

STOT - repeated exposure

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

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

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Carcinogenicity

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

Mixture

No data available.

Ingredient Carcinogenicity Data

No data available.

| Chemical name | CAS No | ACGIH | IARC | NTP | OSHA |
|--------------------|----------|-------|---------|-----|------|
| Isopropyl alcohol | 67-63-0 | - | Group 3 | - | X |
| 2,6-Dimethylphenol | 576-26-1 | A3 | - | - | - |
| Isoamyl acetate | 123-92-2 | - | - | - | - |

Legend

| ACGIH (American Conference of Governmental Industrial Hygienists) | Does not apply |
|---|---------------------------------------|
| IARC (International Agency for Research on Cancer) | Group 3 - Not classifiable as a human |
| | carcinogen |
| NTP (National Toxicology Program) | Does not apply |
| OSHA | X - Present |

Germ cell mutagenicity

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

Mixture invitro Data

No data available.

Substance invitro Data

No data available.

Mixture invivo Data

No data available.

Substance invivo Data

Test data reported below.

Inhalation (Dust/Mist) Exposure Route

| Chemical name | Test | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|--|-------------------------|---------|---------------|------------------|---------------------------------------|--|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | Cytogenetic analysis | Rat | 0.00103 mg/L | 16 weeks | Positive test result for mutagenicity | RTECS |

Reproductive toxicity

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

Product Skin Corrosion/Irritation 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 |
|-------------------|---------------|---------------|---------------|----------------------------|--|
| Isopropyl alcohol | Rat | 32.4 mg/kg | None reported | Effects on Embryo or Fetus | RTECS |
| (20 - 30%) | TDLo | | | Fetal death | |

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| CAS#: 67-63-0 | | | |
|---------------|--|--|--|

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|-------------------|---------------|---------------|---------------|------------------------|--|
| Isopropyl alcohol | Rat | 7000 mg/L | 19 days | Specific Developmental | RTECS |
| (20 - 30%) | TCLo | | | Abnormalities | |
| CAS#: 67-63-0 | | | | Musculoskeletal system | |

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 Acute Toxicity 0 % of the mixture consists of component(s) of unknown hazards to the aquatic

environment.

Product Ecological Data

Aquatic Acute Toxicity No data available.

rio data avanabio.

Aquatic Chronic Toxicity

No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity

Test data reported below.

Fish

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|---------------------|------------------|---------------|--|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | 96 hours | Pimephales promelas | LC ₅₀ | 4200 mg/L | IUCLID |
| 2,6-Dimethylphenol (<1%) CAS#: 576-26-1 | 96 hours | Oryzias latipes | LC ₅₀ | 15 mg/L | ECHA |

Crustacea

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|--|---------------|---------------|---------------|---------------|--|
| Isopropyl alcohol (20 - 30%) CAS#: 67-63-0 | 48 Hours | None reported | LC50 | 1400 mg/L | IUCLID |
| 2,6-Dimethylphenol (<1%) CAS#: 576-26-1 | 48 Hours | Daphina magna | EC50 | 11 mg/L | ECHA |

Algae

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---------------------------------|---------------|-------------------------|---------------|---------------|--|
| Isopropyl alcohol (20 - 30%) | 72 Hours | Scenedesmus subspicatus | EC50 | > 1000 mg/L | IUCLID |

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| CAS#: 67-63-0 | | | |
|---------------|--|--|--|

Aquatic Chronic Toxicity

Test data reported below.

Crustacea

| Chemical name | Exposure | Species | | Reported dose | Key literature references and |
|--------------------------|----------|---------------|------|---------------|-------------------------------|
| | time | | type | | sources for data |
| 2,6-Dimethylphenol (<1%) | 21 days | Daphina magna | NOEC | 0.54 mg/L | ECHA |
| CAS#: 576-26-1 | | | | | |

Persistence and degradability

Product Biodegradability Data

No data available.

Product Bioaccumulation Data

No data available.

Partition coefficient 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

Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

14. TRANSPORT INFORMATION

Transport Canada

UN/ID no UN3316

Proper shipping name CHEMICAL KIT SOLUTION

Transport hazard class(es)

Description UN3316, CHEMICAL KIT SOLUTION, 9

Emergency Response Guide

Number

171

TDG UN/ID no UN3316

Proper shipping name CHEMICAL KIT SOLUTION

Transport hazard class(es)

UN3316, CHEMICAL KIT SOLUTION, 9 Description

IATA

UN number or ID number UN3316

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Proper shipping name Chemical kit solution

Transport hazard class(es) Packing group Ш **ERG Code**

UN3316, Chemical kit solution, 9 Description

IMDG

UN number or ID number UN3316

Proper shipping name CHEMICAL KIT SOLUTION

Transport hazard class(es)

EmS-No F-A, S-P Special precautions for user 251, 340

Description UN3316, CHEMICAL KIT SOLUTION, 9, (26°C C.C.)

Additional information

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

15. REGULATORY INFORMATION

Regulatory information

National Inventories

Complies **DSL/NDSL**

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

International Inventories

TSCA Complies **EINECS/ELINCS** Complies **ENCS** Complies Complies **IECSC KECL - Existing substances** Complies Complies **PICCS TCSI** Complies Complies **AICS** Complies **NZIoC**

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

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

Canada - CEPA - Mercury Containing Products

None

International Regulations

Not applicable The Montreal Protocol on

Substances that Deplete the Ozone

Layer

The Stockholm Convention on **Persistent Organic Pollutants**

Not applicable

The Rotterdam Convention Not applicable

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16. OTHER INFORMATION

Special Comments

None

NFPA and HMIS Classifications

| NFPA | Health hazards - 2 | Flammability - 3 | Instability - 0 | Physical and chemical |
|------|--------------------|------------------|----------------------|-------------------------|
| | | | | properties - |
| HMIS | Health hazards - 2 | Flammability - 3 | Physical hazards - 0 | Personal protection - X |

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

ACGIH ACGIH (American Conference of Governmental Industrial Hygienists)
ATSDR (Agency for Toxic Substances and Disease Registry)
CCRIS (Chemical Carcinogenesis Research Information System)

CDC (Center for Disease Control)

CEPA (Canadian Environmental Protection Agency)

CICAD CICAD (Concise International Chemical Assessment Documents)

ECHA ECHA (The European Chemicals Agency)
EEA EEA (European Environment Agency)
EPA EPA (Environmental Protection Agency)

ERMA ERMA (New Zealands Environmental Risk Management Authority)

ECOSARS Estimation through ECOSARS v1.11 part of the Estimation Programs Interface (EPI) Suite™

FDA FDA (Food & Drug Administration)

GESTIS GESTIS (Information System on Hazardous Substances of the German Social Accident

Insurance)

HSDB (Hazardous Substances Data Bank)

INERIS
INERIS (The National Industrial Environment and Risks Institute)
IPCS INCHEM
IPCS INCHEM (International Programme on Chemical Safety)
IUCLID
IUCLID (The International Uniform Chemical Information Database)
NITE
Japan National Institute of Technology and Evaluation (NITE)

NIH (National Institutes of Health)

NIOSH NIOSH (National Institute for Occupational Safety and Health)
LOLI (List of Lists - An International Chemical Regulatory Database)

NDF no data

NICNAS Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH IDLH Immediately Dangerous to Life or Health

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

PEEN (Pan European Ecological Network)

RTECS (Registry of Toxic Effects of Chemical Substances)
SIDS (Screening Information Dataset) for High Volume Chemicals

SYKE The Finnish Environment Institute (SYKE)
USDA USDA (United States Department of Agriculture)
USDC USDC (United States Department of Commerce)

WHO (World Health Organization)

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

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RSP+ Respiratory sensitization Hazard Designation Carcinogen R Reproductive toxicant

M mutagen

Hach Product Compliance Department **Prepared By**

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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. HACH COMPANY@2022

End of Safety Data Sheet

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