



Be Right™

SAFETY DATA SHEET

Issue Date 14-Jan-2019

Revision Date 15-Jan-2019

Version 1.1

1. Identification

Product identifier

Product Name Bromthymol Blue Indicator Solution

Other means of identification

Product Code(s) 25532

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory reagent. Indicator for pH.

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

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

2. Hazards identification

Classification

| | |
|--|----------------------|
| Flammable liquids | Category 2 - (H225) |
| Skin corrosion/irritation | Category 3 - (H316) |
| Serious eye damage/eye irritation | Category 2A - (H319) |
| Specific target organ toxicity (single exposure) | Category 3 - (H336) |

Label elements

Signal word - Danger

Hazard statements

H225 - Highly flammable liquid and vapor
H316 - Causes mild skin irritation
H319 - Causes serious eye irritation
H336 - May cause drowsiness or dizziness



Flame
Exclamation mark

Precautionary statements

P332 + P313 - If skin irritation occurs: Get medical advice/attention
 P280 - Wear protective gloves/protective clothing/eye protection/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 advice/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

Other Hazards Known

Not applicable

3. Composition/information on ingredients

Substance

Not applicable.

Mixture

| Chemical name | CAS No. | Synonyms | Percent Range |
|-------------------|---------|-------------|---------------|
| Isopropyl alcohol | 67-63-0 | Isopropanol | 60 - 70% |

4. First aid measures

Description of first aid measures

General advice

Show this safety data sheet to the doctor in attendance.

Inhalation

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

| | |
|---|--|
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. 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. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. 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. Prolonged contact may cause redness and irritation. |
|-----------------|---|

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 (CO ₂). 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. |
| Explosion data | |
| Sensitivity to mechanical impact | None. |
| Sensitivity to static discharge | Yes. |
| Special protective actions 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

| | |
|-----------------------------|--|
| Personal precautions | Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. 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. |
| 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.

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

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid contact with skin and eyes. Avoid breathing vapors or mists. Keep away from 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. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. 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.

8. Exposure controls/personal protection

Control parameters

Exposure Limits Based on NOM-010-STPS-2014.

| Chemical name | TWA | STEL | Ceiling Limit Value |
|------------------------------|----------------------------------|-----------------------------------|---------------------|
| Isopropyl alcohol 67-63-0 | 400 ppm 980 mg/m ³ | 500 ppm 1225 mg/m ³ | - |

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

| | |
|---------------------------------------|--|
| Hand protection | Wear suitable gloves. Impervious gloves. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. |
| 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. |
| General hygiene considerations | Do not eat, drink or smoke when using this product. 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. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|-------------------|
| Physical state | Liquid |
| Appearance | aqueous solution |
| Odor | Alcoholic |
| Color | dark green |
| Odor threshold | No data available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|---|-------------------------|
| Molecular weight | No data available | |
| pH | No data available | |
| Melting point/freezing point | ~ -6 °C / 21 °F | |
| Boiling point / boiling range | 69 °C / 156 °F | |
| Evaporation rate | 8.55 (water = 1) | |
| Vapor pressure | 3.225 mm Hg / 0.43 kPa at 25 °C / 77 °F | |
| Vapor density (air = 1) | 1.07 (air = 1) | |
| Specific gravity (water = 1 / air = 1) | 0.98 | |
| 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

| <u>Water solubility classification</u> | <u>Water solubility</u> | <u>Water Solubility Temperature</u> |
|--|-------------------------|-------------------------------------|
| Soluble | > 1000 mg/L | 25 °C / 77 °F |

Solubility in other solvents

| Chemical Name | Solubility classification | Solubility | Solubility Temperature |
|---------------|---------------------------|-------------|------------------------|
| Acid | Soluble | > 1000 mg/L | 25 °C / 77 °F |

Other Information**Metal Corrosivity**

Steel Corrosion Rate No data available
 Aluminum Corrosion Rate No 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% | X |

Explosive properties

Upper explosion limit ~ 12.7%
 Lower explosion limit ~ 2.3%

Flammable properties

Flash point 22 °C / 72 °F
 Method CC (closed cup)

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 No information available.

Chemical stability Stable under normal conditions.

Possibility of Hazardous Reactions None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials None known based on information supplied.

Hazardous Decomposition Products Carbon dioxide. Carbon monoxide.

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. Causes mild skin 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. Prolonged contact may cause redness and irritation. |

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.

Oral Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|-------------------------|---------------|---------------|---|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | Rat LD ₅₀ | 4710 mg/kg | None reported | Behavioral General anesthetic | OECD (Organization for Economic Co-operation and Development) Guideline 429 (Skin Sensitization: Local Lymph Node Assay) |

Dermal Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|----------------------------|---------------|---------------|-----------------------|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | Rabbit LD ₅₀ | 12800 mg/kg | None reported | None reported | RTECS (Registry of Toxic Effects of Chemical Substances) |

Inhalation (Dust/Mist) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|-------------------------|---------------|---------------|--|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | Rat LC ₅₀ | 72.6 mg/L | 4 hours | Behavioral General anesthetic Lungs, Thorax, or Respiration Other changes | RTECS (Registry of Toxic Effects of Chemical Substances) |

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

| | |
|---------------------------------|----------|
| ATE_{mix} (oral) | 7,839.50 |
|---------------------------------|----------|

| | |
|--------------------------------------|--------------------------|
| 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

May cause skin irritation.

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 (60 - 70%) CAS#: 67-63-0 | Standard Draize Test | Rabbit | 500 mg | None reported | Mild skin irritant | RTECS (Registry of Toxic Effects of Chemical Substances) |

Serious eye damage/eye irritation

Classification based on data available for ingredients. Irritating 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 |
|---|----------------------|---------|---------------|---------------|-------------------|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | Standard Draize Test | Rabbit | 100 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.

Skin Sensitization Exposure Route

| Chemical name | Test method | Species | Results | Key literature references and sources for data |
|---|---------------|------------|---------------------------------------|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | None reported | Guinea pig | Not confirmed to be a skin sensitizer | OECD (Organization for Economic Co-operation and Development) Guideline 429 (Skin Sensitization: Local Lymph Node Assay) |

STOT - single exposure

May cause drowsiness or dizziness.

Product Specific Target Organ Toxicity Single Exposure Data

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 (60 - 70%) CAS#: 67-63-0 | Human TD _{Lo} | 223 mg/kg | None reported | Behavioral Hallucinations, Distorted perceptions Cardiac Pulse rate decrease with fall in BP Vascular BP lowering not characterized in autonomic section | RTECS (Registry of Toxic Effects of Chemical Substances) |

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|---------------------------|---------------|---------------|--|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | Human TC _{Lo} | 35 mg/L | 4 hours | Cardiac Pulse rate decrease with fall in BP Lungs, Thorax, or Respiration Other changes | RTECS (Registry of Toxic Effects of Chemical 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

No data available.

Carcinogenicity

.

Product Carcinogenicity Data

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 |

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 (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

No data available.

Product Germ Cell Mutagenicity *in vivo* Data

No data available.

Ingredient Germ Cell Mutagenicity *in vivo* 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 (60 - 70%) CAS#: 67-63-0 | Cytogenetic analysis | Rat | 0.00103 mg/L | 16 weeks | Positive test result for mutagenicity | RTECS (Registry of Toxic Effects of Chemical Substances) |

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 |
|--|-------------------------|---------------|---------------|--|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | Rat TD _{Lo} | 32.4 mg/kg | None reported | Effects on Embryo or Fetus Fetal death | RTECS (Registry of Toxic Effects of Chemical Substances) |

Inhalation (Vapor) Exposure Route

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|-------------------------|---------------|---------------|---|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | Rat TC _{Lo} | 7000 mg/L | 19 days | 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**

Test data reported below.

Fish

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|----------------------------|------------------|---------------|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | 96 hours | <i>Pimephales promelas</i> | LC ₅₀ | 4200 mg/L | IUCLID (The International Uniform Chemical Information Database) |

Crustacea

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|---------------|------------------|---------------|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | 48 Hours | None reported | LC ₅₀ | 1400 mg/L | IUCLID (The International Uniform Chemical Information Database) |

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|--------------------------------|------------------|---------------|--|
| Isopropyl alcohol (60 - 70%) CAS#: 67-63-0 | 72 Hours | <i>Scenedesmus subspicatus</i> | EC ₅₀ | > 1000 mg/L | IUCLID (The International Uniform Chemical Information Database) |

Aquatic Chronic Toxicity

No data available.

Persistence and degradability**Product Biodegradability Data**

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

Contains a substance with an endocrine-disrupting potential.

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 or weld containers.

| |
|---------------------------------------|
| 14. Transportation information |
|---------------------------------------|

MEX

| | |
|----------------------|----------------------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| Description | UN1219, Isopropanol, 3, II |

TDG

| | |
|----------------------|----------------------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| Description | UN1219, Isopropanol, 3, II |

U.S. DOT

| | |
|---------------------------------|----------------------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| Special Provisions | IB2, T4, TP1 |
| Description | UN1219, Isopropanol, 3, II |
| Emergency Response Guide Number | 129 |

ICAO (air)

| | |
|----------------------|----------------------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| Special Provisions | A180 |
| Description | UN1219, Isopropanol, 3, II |

IATA

| | |
|------------------------------|-------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| ERG Code | 3L |
| Special precautions for user | A180 |

IMDG

| | |
|----------------------|-------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| EmS-No | F-E, S-D |

RID

| | |
|----------------------|----------------------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| Classification code | F1 |
| Description | UN1219, Isopropanol, 3, II |

ADR

| | |
|----------------------|-------------|
| UN/ID no | UN1219 |
| Proper shipping name | Isopropanol |

| | |
|-------------------------------------|-----------------------------------|
| Hazard Class | 3 |
| Packing Group | II |
| Classification code | F1 |
| Tunnel restriction code | (D/E) |
| Special precautions for user | 601 |
| Description | UN1219, Isopropanol, 3, II, (D/E) |
| Labels | 3 |

ADN

| | |
|------------------------------|----------------------------|
| Proper shipping name | Isopropanol |
| Hazard Class | 3 |
| Packing Group | II |
| Classification code | F1 |
| Special Provisions | 601 |
| Description | UN1219, Isopropanol, 3, II |
| Hazard label(s) | 3 |
| Limited quantity (LQ) | 1 L |
| Ventilation | VE01 |

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

| | |
|----------------------|---|
| TSCA | Complies. |
| DSL/NDSL | Complies. |
| EINECS/ELINCS | Complies. |
| ENCS | Contact supplier for inventory compliance status. |
| IECSC | Complies. |
| KECL | Complies. |
| PICCS | Complies. |
| AICS | Complies. |

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

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

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

AICS - Australian Inventory of Chemical Substances

16. Other information

| | | | | |
|-------------|-------------------------|-----------------------|---------------------------|---|
| 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**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | SKN* | Skin designation |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
 U.S. Environmental Protection Agency ChemView Database
 European Food Safety Authority (EFSA)
 EPA (Environmental Protection Agency)
 Acute Exposure Guideline Level(s) (AEGl(s))
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
 U.S. Environmental Protection Agency High Production Volume Chemicals
 Food Research Journal
 Hazardous Substance Database
 International Uniform Chemical Information Database (IUCLID)
 Japan GHS Classification
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
 NIOSH (National Institute for Occupational Safety and Health)
 National Library of Medicine's ChemID Plus (NLM CIP)
 National Library of Medicine's PubMed database (NLM PUBMED)
 National Toxicology Program (NTP)
 New Zealand's Chemical Classification and Information Database (CCID)
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program
 Organization for Economic Co-operation and Development Screening Information Data Set
 RTECS (Registry of Toxic Effects of Chemical Substances)
 World Health Organization

Prepared By Hach Product Compliance Department.

Issue Date 14-Jan-2019

Revision Date 15-Jan-2019

Revision Note None

NOM-018-STPS-2015

The information is believed to be accurate, but it is not exhaustive and must be used only as guidance. It is based on the current state of knowledge of the chemical substance or mixture and is applicable to the appropriate safety precautions for the product.

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