



Be Right™

SAFETY DATA SHEET

Issue Date 16-Aug-2018

Revision Date 26-Jan-2024

Version 3.8

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1. IDENTIFICATION

Product identifier

Product Name Fluoride Standard Solution, 5.0 mg/L

Other means of identification

Product Code(s) 2797149

Safety data sheet number M01883

Recommended use of the chemical and restrictions on use

Recommended Use Standard solution.

Uses advised against None.

Restrictions on use None.

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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Signal word

None

Hazard statements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Other Hazards Known

None

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance
Not applicable

Mixture

Percent ranges are used where confidential product information is applicable.

| Chemical name | CAS No | Percent Range | HMRIC # |
|-----------------|-----------|---------------|---------|
| Formaldehyde | 50-00-0 | <0.1% | - |
| Methanol | 67-56-1 | <0.1% | - |
| Sodium fluoride | 7681-49-4 | <0.01% | - |

4. FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|--|
| General advice | No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury. |
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. |

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for additional Toxicological Information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

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 | No information available. |
| Hazardous combustion products | No information available. |
| 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 Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

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 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.

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.

Conditions for safe storage, including any incompatibilities

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

Flammability class Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH |
|------------------------------------|---|--|--|
| Formaldehyde CAS#: 50-00-0 | dermal sensitizer;respiratory sensitizer STEL: 0.3 ppm TWA: 0.1 ppm | TWA: 0.75 ppm (vacated) TWA: 3 ppm (vacated) STEL: 10 ppm (vacated) Ceiling: 5 ppm STEL: 2 ppm | IDLH: 20 ppm Ceiling: 0.1 ppm 15 min TWA: 0.016 ppm |
| Methanol CAS#: 67-56-1 | STEL: 250 ppm TWA: 200 ppm S* | TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) SKN* | IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³ |
| Sodium fluoride CAS#: 7681-49-4 | TWA: 2.5 mg/m ³ F | TWA: 2.5 mg/m ³ (vacated) TWA: 2.5 mg/m ³ | IDLH: 250 mg/m ³ F TWA: 2.5 mg/m ³ F |

Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems. Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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. Ensure adequate ventilation.

Hand Protection Wear suitable gloves. Barrier creams may help to protect the exposed areas of skin. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 2016/425 and the standard EN 374 derived from it. Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374-1:2016.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection No special protective equipment required. Avoid contact with eyes, skin and clothing.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

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 clear | Odor threshold | No data available |
| Odor | Odorless | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--|--|-------------------------|
| Molecular weight | No data available | |
| pH | ~ 7 | @ 20 °C |
| Melting point / freezing point | ~ 0 °C / 32 °F | |
| Initial boiling point and boiling range | ~ 100 °C / 212 °F | |
| Evaporation rate | 1 (water = 1) | |
| Vapor pressure | 17.477 mm Hg / 2.33 kPa at 20 °C / 68 °F | |
| Relative vapor density | 0.62 | |
| Specific gravity - VALUE 1 | 1 | |
| Partition coefficient | Not applicable | |
| Soil Organic Carbon-Water Partition Coefficient | Not applicable | |
| Autoignition temperature | No data available | |

Decomposition temperature No data available
Dynamic viscosity ~ 1 cP (mPa s) at 20 °C / 68 °F
Kinematic viscosity ~ 1 cSt (mm²/s) at 20 °C / 68 °F

Solubility(ies)

Water solubility

| Water solubility classification | Water solubility | Water Solubility Temperature |
|---------------------------------|------------------|------------------------------|
| 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 |
| Ethyl alcohol | 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) |
|-----------------|-----------|--|---------------------|
| Formaldehyde | 50-00-0 | No data available | X |
| Methanol | 67-56-1 | 100% | X |
| Sodium fluoride | 7681-49-4 | 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

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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.

Hazardous polymerization

None under normal processing.

Conditions to avoid

None known based on information supplied.

Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation No known effect based on information supplied.

Eye contact No known effect based on information supplied.

Skin contact No known effect based on information supplied.

Ingestion No known effect based on information supplied.

Symptoms No information available.

Acute toxicity

Based on available data, the classification criteria are not met

Mixture

No data available.

Ingredient Acute Toxicity Data

No data available.

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|-------------------------|---------------|---------------|-----------------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rat LD ₅₀ | 100 mg/kg | None reported | None reported | GESTIS |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Rat LD ₅₀ | 52 mg/kg | None reported | None reported | GESTIS |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Formaldehyde (<0.1%) | Rabbit LD ₅₀ | 270 mg/kg | None reported | None reported | GESTIS |

| | | | | | |
|---|----------------------|----------------------|----------------------|------------------------------|---|
| CAS#: 50-00-0 | | | | | |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Rat LD ₅₀ | 175 mg/kg | None reported | None reported | ERMA |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rat LC ₅₀ | 0.578 mg/L | 4 hours | None reported | LOLI |

Unknown Acute Toxicity

0.01% 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

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

Mixture

No data available.

Ingredient Skin Corrosion/Irritation Data

No data available.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---------------------------------------|--|---------|---------------|---------------|-------------------------------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Standard Draize Test | Human | 0.150 mg | 72 hours | Corrosive to skin | RTECS |
| Methanol (<0.1%) CAS#: 67-56-1 | OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis (Rhe) Test Method | Rabbit | None reported | 20 hours | Not corrosive or irritating to skin | ECHA |

Serious eye damage/irritation

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

Mixture

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available.

| Chemical name | Test method | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---------------------------------------|--|---------|---------------|---------------|-------------------------------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rinse Test | Human | 1 ppm | 6 minutes | Corrosive to eyes | RTECS |
| Methanol (<0.1%) CAS#: 67-56-1 | OECD Test 439: In Vitro Skin Irritation: Reconstructed Human Epidermis | Rabbit | 0.05 mL | 24 hours | Not corrosive or irritating to eyes | ECHA |

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| | | | | | | |
|--|-------------------------|--------|-------|----------|--------------|-------|
| | (Rhe) Test Method | | | | | |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Standard Draize Test | Rabbit | 20 mg | 24 hours | Eye irritant | RTECS |

Respiratory or skin sensitization

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

Mixture

No data available.

Ingredient Sensitization Data

No data available.

| Chemical name | Test method | Species | Results | Key literature references and sources for data |
|--|---|------------|--|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Patch test | Human | Confirmed to be a skin sensitizer | ERMA |
| Methanol (<0.1%) CAS#: 67-56-1 | OECD Test No. 406: Skin Sensitization | Guinea pig | Not confirmed to be a skin sensitizer | ECHA |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | OECD Test No. 406: Skin Sensitization | Guinea pig | Not confirmed to be a skin sensitizer | ECHA |
| Chemical name | Test method | Species | Results | Key literature references and sources for data |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | IgE Specific Immune Response Test | Guinea pig | Confirmed to be a respiratory sensitizer | CICAD |

STOT - single exposure

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

Mixture

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|--|---------------------------|---------------|---------------|---|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Human LD _{Lo} | 70 mg/kg | None reported | Gastrointestinal Kidney, Ureter, or Bladder Liver Other changes Ulcerated stomach Other changes | RTECS |
| Methanol (<0.1%) CAS#: 67-56-1 | Human LD _{Lo} | 143 mg/kg | None reported | Lungs, Thorax, or Respiration Dyspnea | RTECS |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Human TD _{Lo} | 0.214 mg/kg | None reported | Gastrointestinal Changes in structure or function of salivary glands Hypermotility Diarrhea | RTECS |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Methanol (<0.1%) CAS#: 67-56-1 | Human TC _{Lo} | 300 mg/L | None reported | 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.

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---|------------------------|---------------|---------------|--|--|
| Methanol (<0.1%) CAS#: 67-56-1 | Monkey | 2340 mg/kg | 3 days | None reported | ECHA |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Rat TD _{Lo} | 420 mg/kg | 42 days | Brain and Coverings Other degenerative changes Behavioral Somnolence (general depressed activity) Blood Changes in serum composition (e.g. TP, bilirubin, cholesterol) | RTECS |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Rat TC _{Lo} | 1.0 mg/L | 119 days | Biochemical Other degenerative changes Kidney, Ureter, or Bladder Other changes in urine composition Musculoskeletal Changes in teeth and supporting structures | RTECS |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Human TC _{Lo} | 0.017 mg/L | 0.5 days | Eye Lungs, Thorax, or Respiration Lacrimation Other changes | RTECS |

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 |
|-----------------|-----------|-------|---------|-------|------|
| Formaldehyde | 50-00-0 | A1 | Group 1 | Known | X |
| Methanol | 67-56-1 | - | - | - | - |
| Sodium fluoride | 7681-49-4 | - | Group 3 | - | X |

Legend

| | |
|---|----------------|
| ACGIH (American Conference of Governmental Industrial Hygienists) | Does not apply |
| IARC (International Agency for Research on Cancer) | Does not apply |
| NTP (National Toxicology Program) | Does not apply |
| OSHA | Does not apply |

| Chemical name | Endpoint | Reported | Exposure | Toxicological effects | Key literature references and |
|---------------|----------|----------|----------|-----------------------|-------------------------------|
|---------------|----------|----------|----------|-----------------------|-------------------------------|

| | type | dose | time | | sources for data |
|---|------------------------|---------------|---------------|----------------------------|--|
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Mouse TD _{Lo} | 14 mg/kg | 43 weeks | Skin and Appendages Tumors | RTECS |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rat | 15 mg/L | 78 weeks | Olfaction Tumors | RTECS |

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.

| Chemical name | Test | Cell Strain | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|----------------------|------------------|---------------|---------------|---------------------------------------|--|
| Methanol (<0.1%) CAS#: 67-56-1 | DNA inhibition | Human lymphocyte | 300 mmol/L | None reported | Positive test result for mutagenicity | RTECS |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Cytogenetic analysis | Human fibroblast | 20 mg/L | None reported | Positive test result for mutagenicity | RTECS |

Mixture invivo Data

No data available.

Substance invivo Data

No data available.

| Chemical name | Test | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
|---|----------------------|---------|---------------|---------------|---------------------------------------|--|
| Methanol (<0.1%) CAS#: 67-56-1 | DNA damage | Rat | 0.405 mg/kg | None reported | Positive test result for mutagenicity | RTECS |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Cytogenetic analysis | Mouse | 1 mg/L | 3 weeks | Positive test result for mutagenicity | RTECS |
| Chemical name | Test | Species | Reported dose | Exposure time | Results | Key literature references and sources for data |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Micronucleus test | Human | .000985 mg/L | 8.5 years | Positive test result for mutagenicity | RTECS |

Reproductive toxicity

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

Mixture

No data available.

Ingredient Reproductive Toxicity Data

No data available.

| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
|---------------|---------------|---------------|---------------|----------------------------|--|
| Methanol | Rat | 4118 mg/kg | 10 days | Effects on Embryo or Fetus | RTECS |

| | | | | | |
|---|-------------------------|----------------------|----------------------|--|---|
| (<0.1%) CAS#: 67-56-1 | TD _{Lo} | | | Specific Developmental Abnormalities Ear Eye Fetotoxicity (except death e.g. stunted fetus) Urogenital System | |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | Rat TD _{Lo} | 240 mg/kg | None reported | Specific Developmental Abnormalities Musculoskeletal system | RTECS |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Methanol (<0.1%) CAS#: 67-56-1 | Rat TC _{Lo} | 0.0026 mg/L | 22 days | Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus) | RTECS |
| Chemical name | Endpoint type | Reported dose | Exposure time | Toxicological effects | Key literature references and sources for data |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Rat TC _{Lo} | 40 mg/L | 14 days | Effects on Embryo or Fetus Fetotoxicity (except death e.g. stunted fetus) | RTECS |

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

0.01% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Mixture

Aquatic Acute Toxicity

No data available.

Aquatic Chronic Toxicity

No data available.

Substance

Aquatic Acute Toxicity

No data available.

| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
|---|---------------|-------------------------|------------------|---------------|--|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | 96 hours | <i>Morone saxatilis</i> | LC ₅₀ | 6.7 mg/L | PEEN |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | 96 hours | <i>Channa punctatus</i> | LC ₅₀ | 51 mg/L | GESTIS |
| Chemical name | Exposure time | Species | Endpoint type | Reported dose | Key literature references and sources for data |
| Formaldehyde (<0.1%) CAS#: 50-00-0 | 48 Hours | <i>Daphnia pulex</i> | EC ₅₀ | 5.8 mg/L | PEEN |
| Sodium fluoride (<0.01%) CAS#: 7681-49-4 | 48 Hours | <i>Daphnia magna</i> | EC ₅₀ | 98 mg/L | GESTIS |

Aquatic Chronic Toxicity

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No data available.

Persistence and degradability

Mixture

No data available.

Mixture

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

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

U154 U122

| Chemical name | RCRA | RCRA - Basis for Listing | RCRA - D Series Wastes | RCRA - U Series Wastes |
|-------------------------|------|---|------------------------|------------------------|
| Formaldehyde 50-00-0 | U122 | Included in waste streams: K009, K010, K038, K040, K156, K157 | - | U122 |
| Methanol 67-56-1 | - | Included in waste stream: F039 | - | U154 |

Special instructions for disposal

If permitted by regulation. Open cold water tap completely, slowly pour the material to the drain. Flush system with plenty of water. Check with local municipal and state authorities and waste contractors for pertinent local information regarding the proper disposal of chemicals.

14. TRANSPORT INFORMATION

DOT

Not regulated

TDG

Not regulated

IATA

Not regulated

IMDG

Not regulated

Note:

No special precautions necessary.

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

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 does not contain any 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 % |
|-------------------------------|-------------------------------|
| Formaldehyde (CAS #: 50-00-0) | 0.1 |
| Methanol (CAS #: 67-56-1) | 1.0 |

SARA 311/312 Hazard Categories

Acute health hazard No
 Chronic Health Hazard No
 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)

| Chemical name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|------------------------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Formaldehyde 50-00-0 | 100 lb | - | - | X |
| Sodium fluoride 7681-49-4 | 1000 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) |
|------------------------------|--------------------------|----------------|--|
| Formaldehyde 50-00-0 | 100 lb | 100 lb | RQ 100 lb final RQ RQ 45.4 kg final RQ |
| Methanol 67-56-1 | 5000 lb | - | RQ 5000 lb final RQ RQ 2270 kg final RQ |
| Sodium fluoride 7681-49-4 | 1000 lb | - | RQ 1000 lb final RQ RQ 454 kg final RQ |

U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues

| Chemical name | U.S. - Department of Homeland Security - Chemical Facility Anti-Terrorism Standards (CFATS) - Security Issues |
|--|---|
| Formaldehyde (<0.1%) CAS#: 50-00-0 | Release - Toxic (solution) |

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

| Chemical name | California Proposition 65 |
|-------------------------------|---------------------------|
| Formaldehyde (CAS #: 50-00-0) | Carcinogen |
| Methanol (CAS #: 67-56-1) | Developmental |



WARNING: This product can expose you to chemicals including Formaldehyde, Methyl alcohol, which are known to the State of California to cause cancer or birth defects or reproductive harm.
 For more information, go to <http://www.P65Warnings.ca.gov>

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 |
|------------------------------|------------|---------------|--------------|
| Formaldehyde 50-00-0 | X | X | X |
| Methanol 67-56-1 | X | X | X |
| Sodium fluoride 7681-49-4 | X | X | X |

U.S. EPA Label Information

| Chemical name | FIFRA | FDA |
|-----------------|----------|-----|
| Methanol | 180.0910 | - |
| Sodium fluoride | 180.0145 | - |

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

Special Comments

None

Additional information

Global Automotive Declarable Substance List (GADSL)

| Chemical name | Global Automotive Declarable Substance List Classifications | Global Automotive Declarable Substance List Thersholds |
|-------------------------|--|--|
| Formaldehyde 50-00-0 | Prohibited Substance (FI) Prohibited Substance (LR) Declarable Substance (LR) Declarable Substance (FI) | 0.1 % |
| Methanol 67-56-1 | Declarable Substance (FI) Declarable Substance (LR) Prohibited Substance (FI) Prohibited Substance (LR) | 0.6 % |

NFPA and HMIS Classifications

| | | | | |
|-------------|---------------------------|-------------------------|-----------------------------|---|
| NFPA | Health hazards - 0 | Flammability - 0 | Instability - 0 | Physical and chemical properties - |
| HMIS | Health hazards - 0 | Flammability - 0 | Physical hazards - 0 | Personal protection - X -1 |

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

| | |
|-------------|---|
| ACGIH | ACGIH (American Conference of Governmental Industrial Hygienists) |
| ATSDR | ATSDR (Agency for Toxic Substances and Disease Registry) |
| CCRIS | CCRIS (Chemical Carcinogenesis Research Information System) |
| CDC | CDC (Center for Disease Control) |
| CEPA | 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 | 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 | NIH (National Institutes of Health) |
| NIOSH | NIOSH (National Institute for Occupational Safety and Health) |
| LOLI | 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 | OSHA (Occupational Safety and Health Administration of the US Department of Labor) |
| PEEN | PEEN (Pan European Ecological Network) |
| RTECS | RTECS (Registry of Toxic Effects of Chemical Substances) |
| SIDS | 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 | WHO (World Health Organization) |

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

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Issue Date 16-Aug-2018
Version 3.8

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

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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.

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End of Safety Data Sheet