

Safety Data Sheet P-6224

according to U.S. Code of Federal Regulations 29 CFR 1910.1200, Hazard Communication.

Date of issue: 01/01/1998 Revision date: 05/17/2015 Supersedes: 12/01/2009

#### SECTION: 1. Product and company identification

1.1. Product identifier

Product form : Mixture

Other means of identification : Formalin, formic aldehyde, methanal, methyl aldehyde, methylene oxide, oxymethylene.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Industrial use. Use as directed

#### 1.3. Details of the supplier of the safety data sheet

Praxair, Inc.

39 Old Ridgebury Road

Danbury, CT 06810-5113 - USA

T 1-800-772-9247 (1-800-PRAXAIR) - F 1-716-879-2146

www.praxair.com

#### 1.4. Emergency telephone number

Emergency number : Onsite Emergency: 1-800-645-4633

CHEMTREC, 24hr/day 7days/week — Within USA: 1-800-424-9300, Outside USA: 001-703-

527-3887 (collect calls accepted, Contract 17729)

#### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

#### **Classification (GHS-US)**

Flam. Liq. 2 H225 Acute Tox. 4 (Oral) H302 Acute Tox. 3 (Dermal) H311 Acute Tox. 3 (Inhalation) H331 Skin Corr. 1B H314 Eye Dam. 1 H318 Skin Sens. 1 H317 Carc. 1A H350 Aquatic Acute 2 H401

#### 2.2. Label elements

#### **GHS-US** labeling

Hazard pictograms (GHS-US)





GHS06





GHS02

S02

GHS05

GHS07

Signal word (GHS-US) : DANGER

Hazard statements (GHS-US) : H225 - HIGHLY FLAMMABLE LIQUID AND VAPOR

H302 - HARMFUL IF SWALLOWED

H311+H331 - TOXIC IN CONTACT WITH SKIN OR IF INHALED H314 - CAUSES SEVERE SKIN BURNS AND EYE DAMAGE H317 - MAY CAUSE AN ALLERGIC SKIN REACTION

H318 - CAUSES SERIOUS EYE DAMAGE

H350 - MAY CAUSE CANCER H401 - TOXIC TO AQUATIC LIFE

Precautionary statements (GHS-US) : P201 - Obtain spe

P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood

P210 - Keep away from Heat/Open flames/Sparks/Hot surfaces. - No smoking

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

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

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P242 - Use only non-sparking tools.

P243 - Take precautionary measures against static discharge.

P260 - Do not breathe gas/vapors

P261 - Avoid breathing gas, vapors

P264 - Wash exposed skin thoroughly after handling

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

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

P272 - Contaminated work clothing must not be allowed out of the workplace

P273 - Avoid release to the environment.

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

P301+P312 - If swallowed: Call a poison center/doctor if you feel unwell

P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting

P302+P352 - If on skin: Wash with plenty of water

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

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

P308+P313 - If exposed or concerned: Get medical advice/attention

P310 - Immediately call a poison center or doctor/physician.

P311 - Call a poison center/doctor/...

P312 - Call a poison center/doctor if you feel unwell

P321 - Specific treatment (see First aid measures on this label)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

P361 - Take off immediately all contaminated clothing

P362+P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse.

P370+P378 - In case of fire: Use Carbon dioxide, Dry chemical, Water spray or fog to extinguish

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

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

P405 - Store locked up

P501 - Dispose of contents/container in accordance with container supplier/owner instructions.

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS-US)

No data available

#### **SECTION 3: Composition/information on ingredients**

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

| Name           | Product identifier | %         |
|----------------|--------------------|-----------|
| Water          | (CAS No) 7732-18-5 | > 62      |
| Formaldehyde   | (CAS No) 50-00-0   | 37        |
| Methyl alcohol | (CAS No) 67-56-1   | 0.1 - 0.3 |

#### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

First-aid measures after inhalation

: Immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, qualified personnel may give oxygen. Call a physician.

First-aid measures after skin contact

: In case of contact, immediately flush affected areas with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash clothing before reuse. Discard contaminated shoes.

First-aid measures after eye contact

: Immediately flush eyes thoroughly with water for at least 15 minutes. Hold the eyelids open and away from the eyeballs to ensure that all surfaces are flushed thoroughly. Contact an ophthalmologist immediately.

First-aid measures after ingestion

: Get immediate medical attention. Do NOT induce vomiting. If patient is fully conscious, give two glasses of milk or water at once. Never give anything by mouth to an unconscious person.

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Most important symptoms and effects, both acute and delayed 4.2.

Symptoms/injuries : CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

: MAY CAUSE AN ALLERGIC SKIN REACTION. May cause cancer by inhalation. Symptoms/injuries after inhalation

Symptoms/injuries after skin contact Repeated exposure to this material can result in absorption through skin causing significant

health hazard. TOXIC IN CONTACT WITH SKIN.

Symptoms/injuries after eye contact : CAUSES SERIOUS EYE DAMAGE.

Symptoms/injuries after ingestion : Swallowing a small quantity of this material will result in serious health hazard.

#### Indication of any immediate medical attention and special treatment needed

No additional information available

#### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media : Carbon dioxide, dry chemical, foam.

Unsuitable extinguishing media Water may be ineffective.

#### Special hazards arising from the substance or mixture

: HIGHLY FLAMMABLE LIQUID AND VAPOR. Fire hazard

Explosion hazard : May form flammable/explosive vapor-air mixture. Vapors may form explosive mixture with air

and oxidizing agents.

: Exothermic polymerization is possible (see incompaitible materials). Reactivity

#### 5.3. Advice for firefighters

Firefighting instructions

#### : DANGER! Flammable, corrosive liquid and vapor.

Evacuate all personnel from the danger area. Use self-contained breathing apparatus (SCBA) and protective clothing. Immediately cool containers with water from maximum distance. Remove ignition sources if safe to do so. Remove containers from area of fire if safe to do so. On-site fire brigades must comply with OSHA 29 CFR 1910.156 and applicable standards under 29 CFR 1910 Subpart L—Fire Protection.

If vapor or liquid catches fire, do not extinguish flames. Flammable vapors are heavier than air and can spread from leak, creating an explosive reignition hazard at considerable distance from the source. Vapors can be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at locations distant from product handling point. Explosive atmospheres may linger. Before entering an area, especially a confined area, check the atmosphere with an appropriate device.

Special protective equipment for fire fighters

Standard protective clothing and equipment (Self Contained Breathing Apparatus) for fire

fighters.

#### **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

: DANGER! Flammable, corrosive liquid and vapor. . Vapours form explosive mixtures with General measures

air and oxidizing agents. Immediately evacuate all personnel from danger area. Use selfcontained breathing apparatus where needed. Remove all sources of ignition if safe to do so. Reduce vapors with fog or fine water spray, taking care not to spread liquid with water. Stop flow of material if safe to do so. Ventilate area or move container to a well-ventilated area. Flammable vapors may spread from leak and could explode if reignited by sparks or flames. Explosive atmospheres may linger. Before entering area, especially confined areas, check atmosphere with an appropriate device.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

No additional information available

**Environmental precautions** 

Prevent waste from contaminating the surrounding environment. Prevent soil and water pollution. Dispose of contents/container in accordance with local/regional/national/international regulations. Contact supplier for any special requirements.

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: Handle empty containers with care because residual vapors are flammable.

#### 6.3. Methods and material for containment and cleaning up

No additional information available

#### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

#### **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

Additional hazards when processed

Precautions for safe handling

: Do not breathe vapors

Do not get in eyes, on skin, or on clothing.

May irritate skin, eyes, and respiratory tract. Use only with adequate ventilation or respiratory protection. Do not get liquid or vapor in eyes, on skin, or on clothing. Have safety showers and eyewash fountains immediately available. May form explosive mixtures with air. Keep away from heat, sparks, and open flame. Use only spark-proof tools and explosion-proof equipment. Protect containers from damage. Use a suitable hand truck to move containers; do not drag, roll, slide, or drop. For other precautions in using this product, see section 16.

Hygiene measures

Do not eat, drink or smoke when using this product. Wash exposed skin thoroughly after handling. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store only where temperature will not exceed 125°F (52°C). Post "No Smoking or Open Flames" signs in storage and use areas. There must be no sources of ignition. Separate packages and protect against potential fire and/or explosion damage following appropriate codes and requirements (e.g., NFPA 30, NFPA 55, NFPA 70, and/or NFPA 221 in the U.S.) or according to requirements determined by the Authority Having Jurisdiction (AHJ). Always secure containers upright to keep them from falling or being knocked over. Install valve protection cap, if provided, firmly in place by hand when the container is not in use. Store full and empty containers separately. Use a first-in, first-out inventory system to prevent storing full containers for long periods. For other precautions in using this product, see section 16.

Conditions to avoid : Sources of ignition. Heat sources.

7.3. Specific end use(s)

No additional information available

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

| 37 percent Formaldehyde Aqueous Solution |                        |                              |
|--|------------------------|------------------------------|
| ACGIH                                    | ACGIH TLV-C (ppm)      | 0.3 ppm                      |
| USA OSHA                                 | OSHA PEL (TWA) (ppm)   | 0.75 ppm                     |
| USA OSHA                                 | OSHA PEL (STEL) (ppm)  | 2 ppm (see 29 CFR 1910.1048) |
| Methyl alcohol (67-56-1)                 |                        |                              |
| ACGIH                                    | ACGIH TLV-TWA (ppm)    | 200 ppm                      |
| ACGIH                                    | ACGIH TLV-STEL (ppm)   | 250 ppm                      |
| USA OSHA                                 | OSHA PEL (TWA) (mg/m³) | 260 mg/m³                    |
| USA OSHA                                 | OSHA PEL (TWA) (ppm)   | 200 ppm                      |
| Formaldehyde (50-00-0)                   |                        |                              |
| ACGIH                                    | ACGIH TLV-C (ppm)      | 0.3 ppm                      |
| USA OSHA                                 | OSHA PEL (TWA) (ppm)   | 0.75 ppm                     |
| USA OSHA                                 | OSHA PEL (STEL) (ppm)  | 2 ppm (see 29 CFR 1910.1048) |

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8.2. Exposure controls

Appropriate engineering controls : An explosion-proof local exhaust system or a mechanical system is acceptable if it can prevent

oxygen deficiency and keep hazardous fumes and gases below all applicable exposure limits in the worker's breathing area. **NOTE** General Exhaust may be the only practical control method if

devices emitting product fumes are widely dispersed.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Wear work gloves when handling containers. Wear heavy rubber gloves where contact with

product may occur.

Eye protection : Safety glasses with face shield.

Skin and body protection : Select per OSHA 29 CFR 1910.132, 1910.136, and 1910.138.

Respiratory protection : When workplace conditions warrant respirator use, follow a respiratory protection program that

meets OSHA 29 CFR 1910.134, ANSI Z88.2, or MSHA 30 CFR 72.710 (where applicable). Use an air-supplied or air-purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used, the cartridge must be appropriate for the chemical exposure (e.g., an organic vapor cartridge). For emergencies or instances with unknown exposure levels, use a

self-contained breathing apparatus (SCBA).

Other information : Do not eat, drink or smoke during use.

#### **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Liquid

Appearance : Clear, colorless liquid.

Color : Colorless
Odor : strong Pungent
Odor threshold : No data available

pH : 2.8 - 4.0

Relative evaporation rate (butyl acetate=1) : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : 101 °C (214 °F)

Flash point : 85 °C (37% methanol-free)

Critical temperature : 129.5 °C (265.1 °F) (pure formaldehyde)

Auto-ignition temperature : 423.89 °C

Decomposition temperature : No data available

Flammability (solid, gas) : 7 - 73 vol %

Vapor pressure : ≈ 4.38 bar (63.5 psia) (at 20°C (68 °F)) (pure formaldehyde)

Critical pressure : 65.9 bar (956 psia) (pure formaldehyde)

Relative vapor density at 20 °C : No data available Relative density : No data available

Density : 1.11 - 1.14 g/cm³ (at 20 °C)

Solubility : Miscible

Water: Solubility in water of component(s) of the mixture :

• Formaldehyde: 950 g/l (at 20 °C)

Log Pow : No data available
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Explosion limits : No data available

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9.2. Other information

No additional information available

| SECT  | ION 10: Stability and reactivity   |   |
|-------|------------------------------------|---|
| 10.1. | Reactivity                         |   |
|       |                                    | Exothermic polymerization is possible (see incompaitible materials).                                      |
| 10.2. | Chemical stability                 |   |
|       |                                    | UNSTABLE.   |
| 10.3. | Possibility of hazardous reactions |   |
|       |                                    | May occur.  |
| 10.4. | Conditions to avoid                |   |
|       |                                    | Polymerization catalysts.   |
| 10.5. | Incompatible materials             |   |
|       |                                    | Strong oxidizers. Strong alkalies. Strong acids. Alkali metals. Amines. Ammonia. Phenol. Reducing agents. |

10.6. Hazardous decomposition products

Formaldehyde fumes.

Formic acid decomposes slowly during storage and more rapidly under fire conditions, forming carbon monoxide.

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#### **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity : Oral: HARMFUL IF SWALLOWED. Dermal: TOXIC IN CONTACT WITH SKIN. Inhalation: TOXIC IF INHALED.

| 37 percent Formaldehyde Aqueous Solution |                                |  |
|--|--------------------------------|--|
| LD50 oral rat                            | 800 mg/kg                      |  |
| LD50 dermal rabbit                       | 270 mg/kg                      |  |
| LC50 inhalation rat (mg/l)               | 0.578 mg/l/4h                  |  |
| ATE US (oral)                            | 600.000 mg/kg body weight      |  |
| ATE US (dermal)                          | 270.000 mg/kg body weight      |  |
| ATE US (gases)                           | 700.000 ppmV/4h                |  |
| ATE US (vapors)                          | 0.578 mg/l/4h                  |  |
| ATE US (dust, mist)                      | 0.578 mg/l/4h                  |  |
| Water (7732-18-5)                        |                                |  |
| LD50 oral rat                            | > 90 ml/kg                     |  |
| Methyl alcohol (67-56-1)                 |                                |  |
| LD50 oral rat                            | 6200 mg/kg                     |  |
| LC50 inhalation rat (ppm)                | 22500 ppm (Exposure time: 8 h) |  |
| ATE US (oral)                            | 6200.000 mg/kg body weight     |  |
| Formaldehyde (50-00-0)                   |                                |  |
| LD50 oral rat                            | 600 mg/kg                      |  |
| LD50 dermal rabbit                       | 270 mg/kg                      |  |
| LC50 inhalation rat (mg/l)               | 0.578 mg/l/4h                  |  |
| LC50 inhalation rat (ppm)                | 166 ppm/1h                     |  |
| ATE US (oral)                            | 600.000 mg/kg body weight      |  |
| ATE US (dermal)                          | 270.000 mg/kg body weight      |  |
| ATE US (vapors)                          | 0.578 mg/l/4h                  |  |
| ATE US (dust, mist)                      | 0.578 mg/l/4h                  |  |

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Skin corrosion/irritation : CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.

pH: 2.8 - 4.0

Serious eye damage/irritation : CAUSES SERIOUS EYE DAMAGE.

pH: 2.8 - 4.0

Respiratory or skin sensitization : MAY CAUSE AN ALLERGIC SKIN REACTION.

Germ cell mutagenicity : Not classified

Carcinogenicity : MAY CAUSE CANCER.

| inhalation.             |
|-------------------------|
| kin causing significant |
|                         |
| n hazard.               |
| •                       |

#### **SECTION 12: Ecological information**

#### 12.1. Toxicity

| 37 percent Formaldehyde Aqueous Solution |   |
|--|---|
| LC50 fish 1                              | 24.1 (22.6 - 25.7) mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through]) |
| EC50 Daphnia 1                           | 2 mg/l (Exposure time: 48 h - Species: Daphnia magna)                                       |
| LC50 fish 2                              | 1510 μg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])                     |
| EC50 Daphnia 2                           | 11.3 - 18 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])                      |
| Methyl alcohol (67-56-1)                 |   |
| LC50 fish 1                              | 28200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])              |
| LC50 fish 2                              | 100 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])                      |
| Formaldehyde (50-00-0)                   |   |
| LC50 fish 1                              | 22.6 - 25.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])        |
| EC50 Daphnia 1                           | 2 mg/l (Exposure time: 48 h - Species: Daphnia magna)                                       |
| LC50 fish 2                              | 1510 μg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])                     |
| EC50 Daphnia 2                           | 11.3 - 18 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])                      |

#### 12.2. Persistence and degradability

| 37 percent Formaldehyde Aqueous Solution |                  |
|--|------------------|
| Persistence and degradability            | Not established. |

#### 12.3. Bioaccumulative potential

| 37 percent Formaldehyde Aqueous Solution |                  |
|--|------------------|
| Bioaccumulative potential                | Not established. |

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| Methyl alcohol (67-56-1) |                 |  |
|--------------------------|-----------------|--|
| BCF fish 1               | 10 mg/l         |  |
| Log Pow                  | -0.77           |  |
| Formaldehyde (50-00-0)   |                 |  |
| Log Pow                  | 0.35 (at 25 °C) |  |

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

Other information : Avoid release to the environment.

#### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

Regional legislation (waste) : U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII. U.S. -

RCRA (Resource Conservation & Recovery Act) - Hazardous Constituents - Appendix VIII to 40 CFR 261. U.S. - RCRA (Resource Conservation & Recovery Act) - U Series Wastes -

Acutely Toxic Wastes & Other Hazardous Characteristics.

Waste disposal recommendations : Dispose of contents/container in accordance with local/regional/national

regulations. Contact supplier for any special requirements.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Hazardous waste due to toxicity.

#### **SECTION 14: Transport information**

In accordance with DOT

Transport document description : UN1198 Formaldehyde solutions, flammable, 3, III

UN-No.(DOT) : UN119

Proper Shipping Name (DOT) : Formaldehyde solutions, flammable

Transport hazard class(es) (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Hazard labels (DOT) : 3 - Flammable liquid

8 - Corrosive



Packing group (DOT) : III - Minor Danger

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the

bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this

subchapter are applicable.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table

2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal...... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

#### **Additional information**

Emergency Response Guide (ERG) Number : 132 (UN1198)

Other information : No supplementary information available.

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Transport by sea

UN-No. (IMDG) : 1198

Proper Shipping Name (IMDG) : FORMALDEHYDE SOLUTION, FLAMMABLE

Class (IMDG) : 3 - Flammable liquids

Packing group (IMDG) : III - substances presenting low danger

Air transport

UN-No.(IATA) : 1198

Proper Shipping Name (IATA) : Formaldehyde solution, flammable

Class (IATA) : 3 - Flammable Liquids : III - Minor Danger Packing group (IATA)

#### **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

| 37 percent Formaldehyde Aqueous Solution                                  |   |
|---|---|
| Listed on the United States TSCA (Toxic Substances Control Act) inventory |   |
| Listed on the United States SARA Section 302                              |   |
| Listed on United States SARA Section 313                                  |   |
| SARA Section 302 Threshold Planning Quantity (TPQ)                        | 500   |
| SARA Section 311/312 Hazard Classes                                       | Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard Reactive hazard |
| SARA Section 313 - Emission Reporting                                     | 0.1 %   |

#### Methyl alcohol (67-56-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on United States SARA Section 313

SARA Section 313 - Emission Reporting 1.0 %

#### Formaldehyde (50-00-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on the United States SARA Section 302

Listed on United States SARA Section 313

SARA Section 302 Threshold Planning Quantity 500 (TPQ) SARA Section 313 - Emission Reporting 0.1 %

#### 15.2. International regulations

#### **CANADA**

#### 37 percent Formaldehyde Aqueous Solution

Listed on the Canadian DSL (Domestic Substances List)

#### Water (7732-18-5)

Listed on the Canadian DSL (Domestic Substances List)

#### Methyl alcohol (67-56-1)

Listed on the Canadian DSL (Domestic Substances List)

#### Formaldehyde (50-00-0)

Listed on the Canadian DSL (Domestic Substances List)

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#### **EU-Regulations**

#### 37 percent Formaldehyde Aqueous Solution

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Methyl alcohol (67-56-1)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### Formaldehyde (50-00-0)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

#### 15.2.2. National regulations

#### 37 percent Formaldehyde Aqueous Solution

Listed on IARC (International Agency for Research on Cancer)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on the Canadian IDL (Ingredient Disclosure List)

#### Methyl alcohol (67-56-1)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Poisonous and Deleterious Substances Control Law

Listed on the Canadian IDL (Ingredient Disclosure List)

#### Formaldehyde (50-00-0)

Listed on IARC (International Agency for Research on Cancer)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed as carcinogen on NTP (National Toxicology Program)

Listed on the Canadian IDL (Ingredient Disclosure List)

#### 15.3. US State regulations

| 10.0. 00 Otate regulations                                       |   |
|--|---|
| 37 percent Formaldehyde Aqueous Solution()                       |   |
| U.S California - Proposition 65 - Carcinogens List               | Yes   |
| U.S California - Proposition 65 - Developmental Toxicity         | No  |
| U.S California - Proposition 65 - Reproductive Toxicity - Female | No  |
| U.S California - Proposition 65 - Reproductive Toxicity - Male   | No  |
| No significance risk level (NSRL)                                | 40 μg/day   |
| State or local regulations                                       | U.S Massachusetts - Right To Know List U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S Pennsylvania - RTK (Right to Know) - Special Hazardous Substances |

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| 37 percent Formaldehyde Aqueous Solution() |   |
|--|---|
|  | U.S Pennsylvania - RTK (Right to Know) List |

| Water (7732-18-5)  |  |   |  |                                   |
|--|--|---|--|-----------------------------------|
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity - Male | No significance risk level (NSRL) |
| No   | No   | No  | No   | 40 μg/day                         |
| Methyl alcohol (67-56-1)                                 |  |   |  |                                   |
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity - Male | No significance risk level (NSRL) |
| No   | Yes  | No  | No   | 40 μg/day                         |
| Formaldehyde (50-00-0)                                   |  |   |  | <u> </u>                          |
| U.S California -<br>Proposition 65 -<br>Carcinogens List | U.S California -<br>Proposition 65 -<br>Developmental Toxicity | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity -<br>Female | U.S California -<br>Proposition 65 -<br>Reproductive Toxicity - Male | No significance risk level (NSRL) |
| Yes  | No   | No  | No   | 40 μg/day                         |

#### Methyl alcohol (67-56-1)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) List

#### Formaldehyde (50-00-0)

- U.S. Massachusetts Right To Know List
- U.S. New Jersey Right to Know Hazardous Substance List
- U.S. Pennsylvania RTK (Right to Know) Environmental Hazard List
- U.S. Pennsylvania RTK (Right to Know) Special Hazardous Substances
- U.S. Pennsylvania RTK (Right to Know) List

#### **SECTION 16: Other information**

Revision date : 5/17/2015 12:00:00 AM



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Other information

: When you mix two or more chemicals, you can create additional, unexpected hazards. Obtain and evaluate the safety information for each component before you produce the mixture. Consult an industrial hygienist or other trained person when you evaluate the end product. Before using any plastics, confirm their compatibility with this product.

Praxair asks users of this product to study this SDS and become aware of the product hazards and safety information. To promote safe use of this product, a user should (1) notify employees, agents, and contractors of the information in this SDS and of any other known product hazards and safety information, (2) furnish this information to each purchaser of the product, and (3) ask each purchaser to notify its employees and customers of the product hazards and safety information.

The opinions expressed herein are those of qualified experts within Praxair, Inc. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use are not within the control of Praxair. Inc., it is the user's obligation to determine the conditions of safe use of the product.

Praxair SDSs are furnished on sale or delivery by Praxair or the independent distributors and suppliers who package and sell our products. To obtain current SDSs for these products. contact your Praxair sales representative, local distributor, or supplier, or download from www.praxair.com. If you have questions regarding Praxair SDSs, would like the document number and date of the latest SDS, or would like the names of the Praxair suppliers in your area, phone or write the Praxair Call Center (Phone: 1-800-PRAXAIR/1-800-772-9247; Address: Praxair Call Center, Praxair, Inc., P.O. Box 44, Tonawanda, NY 14151-0044).

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NFPA health hazard

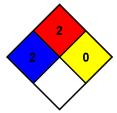
2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.

NFPA fire hazard

NFPA reactivity

: 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



#### **HMIS III Rating**

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability 2 Moderate Hazard : 0 Minimal Hazard Physical

SDS US (GHS HazCom 2012) - Praxair

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.