

SAFETY DATA SHEET



GP 4413 37% Formaldehyde Solution, 13% Methanol Inhibited

Section 1. Identification

Product identifier : GP 4413 37% Formaldehyde Solution, 13% Methanol Inhibited
Other means of identification : DIN 02118114
Product type : Liquid

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

Identified uses

Industrial use

Supplier's details : **Syndel CANADA**
9-4131 Mostar Road
Nanaimo, BC Canada
V9T 6A6
1-800-663-2282

Emergency telephone number (with hours of operation) : In Canada, call CANUTEC at 613-996-6666 (24hrs)

Section 2. Hazard identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (oral) - Category 3
ACUTE TOXICITY (dermal) - Category 3
ACUTE TOXICITY (inhalation) - Category 2
SKIN CORROSION - Category 1B
SERIOUS EYE DAMAGE - Category 1
SKIN SENSITIZATION - Category 1
GERM CELL MUTAGENICITY - Category 2
CARCINOGENICITY - Category 1
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (central nervous system (CNS), eyes, gastrointestinal tract, kidneys, skin) - Category 1
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system, respiratory tract) - Category 1

GHS label elements

Hazard pictograms



Signal word : Danger

Hazard statements : Combustible liquid.
Fatal if inhaled.
Toxic if swallowed or in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause cancer.
Suspected of causing genetic defects.
Causes damage to organs. (central nervous system (CNS), eyes, gastrointestinal tract, kidneys, skin)

Section 2. Hazard identification

Causes damage to organs through prolonged or repeated exposure. (respiratory system, respiratory tract)

Precautionary statements

General

- : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention

- : Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear protective clothing. Wear eye or face protection. Wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Response

- : Get medical attention if you feel unwell. IF exposed or concerned: Call a POISON CENTER or physician. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF ON SKIN: Take off immediately all contaminated clothing and wash it before reuse. Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage

- : Store locked up.

Disposal

- : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

| Ingredient name | % (w/w) | CAS number |
|-----------------|---------|------------|
| formaldehyde | 37.284 | 50-00-0 |
| methanol | 13.937 | 67-56-1 |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-aid measures

Description of necessary first aid measures

Eye contact

- : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation

- : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or

Section 4. First-aid measures

- Skin contact** : waistband.
: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Fatal if inhaled.
- Skin contact** : Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.
- Ingestion** : Toxic if swallowed.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 15 to 30°C (59 to 86°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|--|
| formaldehyde | <p>CA Alberta Provincial (Canada, 6/2018). C: 1.3 mg/m³ 8 hrs OEL: 0.75 ppm 8 hours. 8 hrs OEL: 0.9 mg/m³ 8 hours. C: 1 ppm</p> <p>CA British Columbia Provincial (Canada, 7/2018). Skin sensitizer. Inhalation sensitizer. TWA: 0.3 ppm 8 hours. C: 1 ppm</p> <p>CA Ontario Provincial (Canada, 1/2018). C: 1.5 ppm STEL: 1 ppm 15 minutes.</p> <p>CA Quebec Provincial (Canada, 1/2014). STEV: 2 ppm 15 minutes. STEV: 3 mg/m³ 15 minutes.</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). Skin sensitizer. CEIL: 0.3 ppm</p> |
| methanol | <p>CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.</p> |

Section 8. Exposure controls/personal protection

8 hrs OEL: 262 mg/m³ 8 hours.
 8 hrs OEL: 200 ppm 8 hours.
 15 min OEL: 250 ppm 15 minutes.
 15 min OEL: 328 mg/m³ 15 minutes.
CA British Columbia Provincial (Canada, 7/2018). Absorbed through skin.
 TWA: 200 ppm 8 hours.
 STEL: 250 ppm 15 minutes.
CA Ontario Provincial (Canada, 1/2018). Absorbed through skin.
 TWA: 200 ppm 8 hours.
 STEL: 250 ppm 15 minutes.
CA Quebec Provincial (Canada, 1/2014). Absorbed through skin.
 TWAEV: 200 ppm 8 hours.
 TWAEV: 262 mg/m³ 8 hours.
 STEV: 250 ppm 15 minutes.
 STEV: 328 mg/m³ 15 minutes.
CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.
 STEL: 250 ppm 15 minutes.
 TWA: 200 ppm 8 hours.

Appropriate engineering controls

- : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

- : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

- : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

- : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid
- Color** : Clear.
- Odor** : Pungent.
- Odor threshold** : 0.1 ppm
- pH** : 3
- Melting point** : Not available.
- Boiling point** : 98.9 °C (210 °F)
- Flash point** : Closed cup: 62.8 °C (145 °F)
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Not available.
- Vapor pressure** : Not available.
- Vapor density** : 1.03 [Air = 1]
- Relative density** : 1.09
- Solubility** : Soluble in the following materials: cold water and hot water.
- Solubility in water** : Not available.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : Not available.
- Decomposition temperature** : Not available.
- Viscosity** : Not available.
- Flow time (ISO 2431)** : Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials:
oxidizing materials

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|----------------------|---------|-------------|----------|
| formaldehyde | LC50 Inhalation Gas. | Rat | 250 ppm | 4 hours |
| | LC50 Inhalation Gas. | Rat | 480 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 270 mg/kg | - |
| | LD50 Dermal | Rabbit | 270 mg/kg | - |
| | LD50 Oral | Rat | 100 mg/kg | - |
| | LD50 Oral | Rat | 640 mg/kg | - |
| methanol | LC50 Inhalation Gas. | Rat | 145000 ppm | 1 hours |
| | LC50 Inhalation Gas. | Rat | 64000 ppm | 4 hours |
| | LD50 Dermal | Rabbit | 15800 mg/kg | - |
| | LD50 Oral | Rat | 5600 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|--------------------------------------|-------------|
| formaldehyde | Eyes - Mild irritant | Human | - | 6 minutes 1 parts per million | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 750 Micrograms | - |
| | Eyes - Severe irritant | Rabbit | - | 750 Micrograms | - |
| | Skin - Mild irritant | Human | - | 72 hours 150 Micrograms Intermittent | - |
| | Skin - Severe irritant | Human | - | 0.01 Percent | - |
| | Skin - Mild irritant | Rabbit | - | 540 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 50 milligrams | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 2 milligrams | - |
| methanol | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 milligrams | - |
| | Eyes - Moderate irritant | Rabbit | - | 40 milligrams | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Section 11. Toxicological information

Conclusion/Summary

: The International Agency for Research on Cancer (IARC) and The National Toxicology Program (NTP) classify formaldehyde as a carcinogen due to cancers of the upper respiratory system and leukemia. OSHA regulates formaldehyde as a potential carcinogen for exposures at or exceeding 0.5 ppm. The weight of the scientific evidence surrounding the potential association between formaldehyde and cancer risk for both upper respiratory cancer as well as leukemia is conflicting even when significant and prolonged exposure to inhaled formaldehyde are involved.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|--------------|------------|------------------------|--|
| formaldehyde | Category 1 | Not determined Oral | kidneys gastrointestinal tract |
| methanol | Category 1 | Skin Not determined | eyes and skin central nervous system (CNS) and eyes |

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|--------------|------------|-------------------|--|
| formaldehyde | Category 1 | Inhalation | respiratory system and respiratory tract |

Aspiration hazard

Not available.

Information on the likely routes of exposure

: Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact

: Causes serious eye damage.

Inhalation

: Fatal if inhaled.

Skin contact

: Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.

Ingestion

: Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

: Adverse symptoms may include the following:
pain
watering
redness

Inhalation

: No specific data.

Skin contact

: Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Section 11. Toxicological information

Ingestion : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : Suspected of causing genetic defects.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|---------------------|-------------|
| Oral | 195.2 mg/kg |
| Dermal | 541.9 mg/kg |
| Inhalation (vapors) | 1.262 mg/l |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|--------------------------------------|---|----------|
| formaldehyde | Acute EC50 3.48 mg/l Fresh water | Algae - Desmodesmus subspicatus | 72 hours |
| | Acute EC50 0.788 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Acute EC50 12.98 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours |
| | Acute EC50 5800 µg/l Fresh water | Daphnia - Daphnia pulex - Neonate | 48 hours |
| | Acute LC50 1.41 ppm Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| | Chronic NOEC 0.005 mg/l Marine water | Algae - Isochrysis galbana - Exponential growth phase | 96 hours |
| | Chronic NOEC 953.9 ppm Fresh water | Fish - Oncorhynchus tshawytscha - Egg | 43 days |
| methanol | Acute EC50 16.912 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Acute LC50 2500000 µg/l Marine water | Crustaceans - Crangon crangon - Adult | 48 hours |

Section 12. Ecological information

| | | | |
|--|-------------------------------------|-----------------------------------|----------|
| | Acute LC50 3289 mg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 290 mg/l Fresh water | Fish - Danio rerio - Egg | 96 hours |
| | Chronic NOEC 9.96 mg/l Marine water | Algae - Ulva pertusa | 96 hours |

Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| formaldehyde | - | - | Readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-----|-----------|
| methanol | -0.77 | <10 | low |

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.






Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | TDG Classification | DOT Classification | ADR/RID | IMDG | IATA |
|-------------------------|------------------------|------------------------|----------------|---|------------------------|
| UN number | UN2209 | UN2209 | Not available. | UN2209 | UN2209 |
| UN proper shipping name | Formaldehyde solutions | Formaldehyde solutions | | Formaldehyde solutions Marine pollutant (Formaldehyde) | Formaldehyde solutions |
| | | | | | |

Section 14. Transport information

| | | | | | |
|-----------------------------------|--|---|---|---|--|
| Transport hazard class(es) | 8  | 8  | | 8   | 8  |
| Packing group | III | III | | III | III |
| Environmental hazards | Yes. | No. | | Yes. | Yes. The environmentally hazardous substance mark is not required. |
| Additional information | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail. | Reportable quantity 268.21 lbs / 121.77 kg [29.512 gal / 111.71 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. | - | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : The following components are listed: formaldehyde; methanol

CEPA Toxic substances : The following components are listed: Formaldehyde

Canada inventory : All components are listed or exempted.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

Section 15. Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

| | |
|--------------------------|---|
| Australia | : All components are listed or exempted. |
| China | : All components are listed or exempted. |
| Europe | : All components are listed or exempted. |
| Japan | : Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : Not determined. |
| Malaysia | : All components are listed or exempted. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : All components are listed or exempted. |
| Republic of Korea | : All components are listed or exempted. |
| Taiwan | : All components are listed or exempted. |
| Turkey | : Not determined. |
| United States | : All components are listed or exempted. |

FDA

21 CFR 176.170(b)(2) and (c) May be used as a component of the food-contact surface of paper and paperboard, provided that the food-contact surface of the paper and paperboard complies with extractives limitations prescribed in paragraph (c) of this section.

Limitation: For use only as a preservative for coating formulations.

21 CFR 176.200 May be used safely as a component of articles intended for use in producing, manufacturing, packing, processing, preparing, treating, packaging, transporting or holding food.

Limitation: For use only as a preservative for coating formulations.

Section 16. Other information

History

| | |
|---------------------------------------|-------------|
| Date of printing | : 9/16/2019 |
| Date of issue/Date of revision | : 9/16/2019 |
| Date of previous issue | : 7/11/2019 |
| Version | : 4 |

| | |
|-----------------------------|--|
| Key to abbreviations | : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations HPR = Hazardous Products Regulations |
|-----------------------------|--|

Procedure used to derive the classification

Section 16. Other information

| Classification | Justification |
|---|-----------------------|
| FLAMMABLE LIQUIDS - Category 4 | On basis of test data |
| ACUTE TOXICITY (oral) - Category 3 | Calculation method |
| ACUTE TOXICITY (dermal) - Category 3 | Calculation method |
| ACUTE TOXICITY (inhalation) - Category 2 | Calculation method |
| SKIN CORROSION - Category 1B | Calculation method |
| SERIOUS EYE DAMAGE - Category 1 | Calculation method |
| SKIN SENSITIZATION - Category 1 | Calculation method |
| GERM CELL MUTAGENICITY - Category 2 | Calculation method |
| CARCINOGENICITY - Category 1 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (central nervous system (CNS), eyes, gastrointestinal tract, kidneys, skin) - Category 1 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory system, respiratory tract) - Category 1 | Calculation method |

References

Indicates information that has changed from previously issued version.

Notice to reader

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.