# SAFETY DATA SHEET

## Section 1. Identification

**Product name** Acetic Acid Solutions (50-79%)

**SDS #** 0000000835

**Historic SDS #:** 3467

**Code** 0000000835

**Chemical formula** C2-H4-O2

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

**Product use** Industrial applications
For specific application advice see appropriate Technical Data Sheet or consult our company representative.

**Supplier** BP Amoco Chemical Company
150 West Warrenville Road
Naperville, Illinois 60563-8460
USA

**EMERGENCY HEALTH INFORMATION:** 1 (800) 447-8735

Outside the US: +1 703-527-3887 (CHEMTREC)

**EMERGENCY SPILL INFORMATION:** 1 (800) 424-9300 CHEMTREC (USA)

## Section 2. Hazards identification

**OSHA/HCS status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture**
SKIN CORROSION - Category 1A
SERIOUS EYE DAMAGE - Category 1

**GHS label elements**

**Hazard pictograms**

**Signal word** Danger

**Hazard statements** Causes severe skin burns and eye damage.

**Precautionary statements**

**Prevention** Wear protective gloves. Wear eye or face protection: Recommended: Chemical splash goggles. Face shield.. Wear protective clothing. Wash hands thoroughly after handling.

**Response** 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 or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. 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** Not applicable.

## Section 2. Hazards identification

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

**Hazards not otherwise classified** Corrosive to respiratory tract

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

| Ingredient name | CAS number | % |
|---|---|---|
| Acetic acid<br>Water | 64-19-7<br>7732-18-5 | 50 - 79<br>Balance |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

**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 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** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention immediately. Chemical burns must be treated promptly by a physician.

**Skin contact** Get medical attention immediately. In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Clean shoes thoroughly before reuse. Chemical burns must be treated promptly by a physician.

**Inhalation** If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.

**Ingestion** Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention immediately. Chemical burns must be treated promptly by a physician.

**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.

### Most important symptoms/effects, acute and delayed

**See Section 11 for more detailed information on health effects and symptoms.**

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

**Notes to physician** Treatment should in general be symptomatic and directed to relieving any effects.

**Specific treatments** No specific treatment.

## Section 5. Fire-fighting measures

### Extinguishing media

**Suitable extinguishing media** Use dry chemical, $CO_2$, water spray (fog) or foam. (alcohol-resistant foam)

**Unsuitable extinguishing media** Do not use water jet.

## Section 5. Fire-fighting measures

**Specific hazards arising from the chemical**

In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion products**

Combustion products may include the following:
carbon oxides (CO, $CO_2$) (carbon monoxide, carbon dioxide)

**Special protective actions for fire-fighters**

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.

**Special protective equipment for fire-fighters**

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

## Section 6. Accidental release measures

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

**For non-emergency personnel**

Immediately contact 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. Do not breathe vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling.

**For emergency responders**

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. 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**

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. 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. Contaminated absorbent material may pose the same hazard as the spilled product. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures**

Put on appropriate personal protective equipment. 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. 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. Take precautionary measures against electrostatic discharges. Do not reuse container. Empty containers retain product residue and can be hazardous.

**Advice on general occupational hygiene**

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

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities**

Store in accordance with local regulations. 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. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. 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. Protect from freezing.

## Section 8. Exposure controls/personal protection

**Control parameters**

**Occupational exposure limits**

| Ingredient name | Exposure limits |
|---|---|
| acetic acid | **ACGIH TLV (United States).**<br>STEL: 37 mg/m³ 15 minutes. Issued/Revised: 9/1994<br>STEL: 15 ppm 15 minutes. Issued/Revised: 9/1994<br>TWA: 25 mg/m³ 8 hours. Issued/Revised: 9/1994<br>TWA: 10 ppm 8 hours. Issued/Revised: 9/1994<br>**OSHA PEL (United States).**<br>TWA: 25 mg/m³ 8 hours. Issued/Revised: 6/1993<br>TWA: 10 ppm 8 hours. Issued/Revised: 6/1993 |

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

**Appropriate engineering controls**

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.
Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

**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.
Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

Recommended: Chemical splash goggles. Face shield.

**Skin protection**

## Section 8. Exposure controls/personal protection

**Hand protection**

Wear chemical resistant gloves. Butyl rubber gloves.

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

**Body protection**

Use of protective clothing is good industrial practice.
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.
Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.
Wear suitable protective clothing.
Footwear highly resistant to chemicals.
When there is a risk of ignition wear inherently fire resistant protective clothes and gloves.
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static.
When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required.
Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.
**Recommended**:
Hard hat.
Chemical resistant boots.
Chemical resistant apron
Full chemical protective suit with a hood.
Chemical protective suit consisting of a jacket and trousers. The jacket should be buttoned up to the neck, sleeves sealed at the gloves, and trouser legs worn outside the boots. These precautions are required to prevent the clothing from accidentally trapping product against the skin.

**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**

Use only with adequate ventilation. Do not breathe vapor or mist. If ventilation is inadequate, use NIOSH-certified respirator which will protect against organic vapor. If operating conditions cause high vapor concentrations or the TLV is exceeded, use supplied-air respirator.

If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.

## Section 9. Physical and chemical properties

**Appearance**

**Physical state** Liquid.

**Color** Clear Colorless.

**Odor** Vinegar [Strong]

**Odor threshold** 0.48 ppm Based on acetic acid

**pH** <3

**Melting point** May start to solidify at the following temperature: <16°C (<60.8°F)

**Boiling point** 107 to 118°C (224.6 to 244.4°F)

## Section 9. Physical and chemical properties

| | |
|---|---|
| **Flash point** | Closed cup: >100°C (>212°F) |
| **Evaporation rate** | Not available. |
| **Flammability (solid, gas)** | Not applicable. Based on - Physical state |
| **Lower and upper explosive (flammable) limits** | Not available. |
| **Vapor pressure** | 1.7 to 1.9 kPa (13 to 14 mm Hg) |
| **Vapor density** | <2.07 [Air = 1] |
| **Density** | Not available. |
| **Relative density** | 1.053 to 1.068 [at 20°C] |
| **Solubility** | Soluble in water. |
| **Solubility** | Easily soluble in the following materials: cold water and hot water. |
| **Partition coefficient: n-octanol/water** | Not available. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **Viscosity** | Not available. |

## Section 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information. |
| **Chemical stability** | The product is stable. |
| **Possibility of hazardous reactions** | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur. |
| **Conditions to avoid** | Keep away from all sources of ignition, heat, sparks, flame. Avoid strong oxidizing conditions. |
| **Incompatible materials** | Reactive or incompatible with the following materials: oxidizing materials, reducing materials, metals and alkalis. |
| **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 | Test | Species | Result | Exposure | Remarks |
|---|---|---|---|---|---|
| acetic acid | LC50 Inhalation Vapor | Mouse | 5620 ppm | 1 hours | - |
| | LC50 Inhalation Vapor | Rat | >16000 ppm | 4 hours | - |
| | LD50 Oral | Mouse | 4960 mg/kg | - | Based on sodium acetate |
| | LD50 Oral | Rat | 3530 mg/kg | - | - |
| | LD50 Oral | Rat | 3310 mg/kg | - | Based on sodium acetate |
| | RD50 Inhalation Vapor | Mouse - Male | 277 ppm | 1 hours | - |

## Section 11. Toxicological information

**Conclusion/Summary** Not available.

**Irritation/Corrosion**

| Product/ingredient name | Species | Result | Score | Exposure | Observation | Conc. | Remarks |
|---|---|---|---|---|---|---|---|
| acetic acid | Rabbit | Skin - Slightly irritating to the skin. | - | 4 hours 3.3 % | 72 hours | 3.3 % | - |
| | Rabbit | Skin - Slightly irritating to the skin. | - | 4 hours 10 % | 72 hours | 10 % | - |
| | Rabbit | Eyes - Irritant | - | 4 hours 0.1 ml, 10 % | 72 hours | 0.1 ml, 10 % | - |
| | Rabbit | Eyes - Severe irritant | - | 0.01 ml, 10 % | - | 0.01 ml, 10 % | - |
| | Rabbit | Eyes - Cornea opacity | - | 3 minutes 0.1 ml, 5 % | 7 days | 0.1 ml, 5 % | - |

**Mutagenicity**

| Product/ingredient name | Test | Experiment | Result | Remarks |
|---|---|---|---|---|
| acetic acid | OECD 476 | Experiment: In vitro<br>Subject: Mammal - species unspecified | Negative | Based on Acetic anhydride |
| | OECD 473 | Experiment: In vitro<br>Subject: Mammal - species unspecified | Negative | - |
| | OECD 471 | Experiment: In vitro<br>Subject: Non-mammalian species | Negative | - |
| | OECD 474 | Experiment: In vivo<br>Subject: Unspecified | Negative | Based on Acetic anhydride |

**Conclusion/Summary** Not classified. Based on available data, the classification criteria are not met.

**Reproductive toxicity**

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species | Result | Exposure |
|---|---|---|---|---|---|---|
| acetic acid | - | - | Negative | Rabbit | Oral | 13 days |
| | - | - | Negative | Rat | Oral | 10 days |
| | - | - | Negative | Mouse | Oral | 10 days |

**Conclusion/Summary** Development: Not classified. Based on available data, the classification criteria are not met. Assessment was by using a weight of evidence approach.
Fertility: Not classified. Based on available data, the classification criteria are not met. Assessment was by using a weight of evidence approach.
Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met. Assessment was by using a weight of evidence approach.

**Information on the likely routes of exposure** Routes of entry anticipated: Oral, Dermal, Inhalation.

**Potential acute health effects**

**Eye contact** Causes serious eye damage.

**Skin contact** Causes severe burns.

## Section 11. Toxicological information

**Inhalation** May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

**Ingestion** May cause burns to mouth, throat and stomach.

### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** Adverse symptoms may include the following:
pain
watering
redness

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

**Inhalation** Adverse symptoms may include the following:
respiratory tract irritation
coughing

**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

**General** No known significant effects or critical hazards.

**Carcinogenicity** No known significant effects or critical hazards.

**Mutagenicity** No known significant effects or critical hazards.

**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 | 5764.18 mg/kg |

**Other information** Acetic Acid: Humans unacclimatized to acetic acid vapors experience extreme eye and nasal irritation at concentrations above 25 ppm. Air concentrations of 50 ppm are considered intolerable, causing intense lacrymation (eye weeping), nose, and throat irritation. Repeated exposures to high concentrations in man can cause eye conjunctival lesions, blackening of the hands, hyperkeratosis (thickening) of the skin, teeth erosion, congestion and edema of the pharynx, bronchial constriction, and respiratory tract irritation.

## Section 12. Ecological information

### Toxicity

No testing has been performed by the manufacturer.

| Product/ingredient name | Species | Test/Result | Exposure | Effects | Remarks |
|---|---|---|---|---|---|
| acetic acid | Algae | Acute EC50 >300.82 mg/l Nominal Marine water | 72 hours | (growth rate) | Based on Acetate ion |
| | Daphnia | Acute EC50 >300.82 mg/l Nominal Fresh water | 48 hours | Mobility | Based on Acetate ion |
| | Fish | Acute LC50 >300.82 mg/l Nominal Fresh water | 96 hours | Mortality | Based on Acetate ion |
| | Algae | Acute NOEC 300.82 mg/l Nominal Marine water | 72 hours | (growth rate) | Based on Acetate ion |
| | Micro-organism | Acute NOEC 850 mg/l Nominal Fresh water | 16 hours | - | - |

**Conclusion/Summary** Not classified as dangerous.

### Persistence and degradability

Readily biodegradable

| Product/ingredient name | Test | Result | Remarks |
|---|---|---|---|
| acetic acid | not guideline | 96 % - Readily - 20 days | - |
| | not guideline | 50 % - 26.7 days | Phototransformation in Air |
| | not guideline | 50 % - 2 days | Biodegradation in Soil |

**Conclusion/Summary** Not available.

### Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

### Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)** Not available.

**Mobility** This product may move with surface or groundwater flows because its water solubility is: 100% Miscible in water.

## Section 13. Disposal considerations

**Disposal methods** The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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

## Section 13. Disposal considerations

cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

| | DOT Classification | TDG Classification | IMDG | IATA |
|---|---|---|---|---|
| **UN number** | UN2790 | UN2790 | UN2790 | UN2790 |
| **UN proper shipping name** | Acetic acid solution RQ (acetic acid) | ACETIC ACID SOLUTION | ACETIC ACID SOLUTION | Acetic acid solution |
| **Transport hazard class(es)** | 8   | 8   | 8   | 8   |
| **Packing group** | II | II | II | II |
| **Environmental hazards** | No. | No. | No. | No. |
| **Additional information** | **Reportable quantity** 6329.1 lbs / 2873.4 kg [715.77 gal / 2709.5 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. **Limited quantity** Yes. **Packaging instruction** Exceptions: 154. Non-bulk: 202. Bulk: 242. **Quantity limitation** Passenger aircraft/rail: 1 L. Cargo aircraft: 30 L. **Special provisions** A3, A6, A7, A10, B2, IB2, T7, TP2 | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.40-2.42 (Class 8). **Explosive Limit and Limited Quantity Index** 1 **Passenger Carrying Road or Rail Index** 1 | **Emergency schedules** F-A, S-B | **Quantity limitation** Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0.5 L. Packaging instructions: Y840. |

**Special precautions for user** Not available.

**Transport in bulk according to Annex II of MARPOL and the IBC Code** Not available.

## Section 15. Regulatory information

**U.S. Federal regulations**

**United States inventory (TSCA 8b)** All components are active or exempted.

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 311/312**

**Classification** SKIN CORROSION - Category 1A
SERIOUS EYE DAMAGE - Category 1

**SARA 313**

**Form R - Reporting requirements** This product does not contain any hazardous ingredients at or above regulated thresholds.

**Supplier notification** This product does not contain any hazardous ingredients at or above regulated thresholds.

**State regulations**

**Massachusetts** The following components are listed: ACETIC ACID; ACETIC ACID GLACIAL

**New Jersey** The following components are listed: ACETIC ACID; ETHANOIC ACID

**Pennsylvania** The following components are listed: ACETIC ACID; ACETIC ACID, WATER SOLUTIONS

**California Prop. 65**

This product does not require a Safe Harbor warning under California Prop. 65.

**Other regulations**

**Australia inventory (AICS)** All components are listed or exempted.

**Canada inventory** All components are listed or exempted.

**China inventory (IECSC)** All components are listed or exempted.

**Japan inventory (ENCS)** All components are listed or exempted.

**Korea inventory (KECI)** All components are listed or exempted.

**Philippines inventory (PICCS)** All components are listed or exempted.

**Taiwan Chemical Substances Inventory (TCSI)** All components are listed or exempted.

**REACH Status** For the REACH status of this product please consult your company contact, as identified in Section 1.

## Section 16. Other information

**National Fire Protection Association (U.S.A.)**


**History**

**Date of issue/Date of revision** 02/04/2020.

**Date of previous issue** 04/28/2016.

**Prepared by** Product Stewardship

## Section 16. Other information

**Key to abbreviations**

ACGIH = American Conference of Industrial Hygienists
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS Number = Chemical Abstracts Service Registry Number
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)
OEL = Occupational Exposure Limit
SDS = Safety Data Sheet
STEL = Short term exposure limit
TWA = Time weighted average
UN = United Nations
UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.
Varies = may contain one or more of the following 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0, 72623-87-1

**Indicates information that has changed from previously issued version.**

**Notice to reader**

*All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.*

*The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.*

*It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.*