SAFETY DATA SHEET

Section 1. Identification

Product name Acetic Acid Chemically Pure

Chemical name Acetic acid.

Other means of identification Acetic Acid Chemically Pure

Acetic acid. Ethanoic acid; Ethylic acid; Methanecarboxylic acid; Eisessig; Acetic acid, glacial

SDS # 0000001037

Historic SDS #: 11001(BP), 0000000794, 5130

Code 0000001037

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
Tel: 1 (877) 701-2726

EMERGENCY HEALTH INFORMATION: 1 (800) 447-8735

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

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

OTHER PRODUCT INFORMATION

1 (866) 4 BP - MSDS
(866-427-6737 Toll Free - North America)
email: bpcares@bp.com

Section 2. Hazards identification

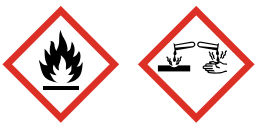
OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 1A

GHS label elements

Hazard pictograms



Signal word Danger

Hazard statements

Flammable liquid and vapor.
Causes severe skin burns and eye damage.

Precautionary statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Use explosion-proof electrical/ventilating/lighting/material-handling equipment.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wear protective gloves/clothing and eye/face protection.

Section 2. Hazards identification

Response	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	Not applicable.
Disposal	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	Not applicable.
Hazards not otherwise classified	None known.

Section 3. Composition/information on ingredients

Substance/mixture Substance

Chemical name

Ingredient name	CAS number	%
Acetic acid	64-19-7	99.9

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

There are no 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	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. Chemical burns must be treated promptly by a physician. Get medical attention immediately.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
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. Chemical burns must be treated promptly by a physician. Get medical attention immediately.
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.

Specific hazards arising from the chemical
Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Vapors can form explosive mixtures with air. Vapors are heavier than air and can spread along the ground or float on water surfaces to remote ignition sources. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous combustion products
Combustion products may include the following:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters
DO NOT FIGHT FIRE WHEN IT REACHES MATERIAL. Withdraw from area and allow the fire to burn. 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 positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Special remarks on fire hazards
DO NOT FIGHT FIRE WHEN IT REACHES MATERIAL. Withdraw from fire and let it burn. 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 remarks on explosion hazards
May form explosive mixtures with air.

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. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Eliminate all ignition sources.

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. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.

Section 6. Accidental release measures

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. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. 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.

Conditions for safe storage, including any incompatibilities

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. 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).** STEL: 37 mg/m³ 15 minutes. Issued/Revised: 9/1994 STEL: 15 ppm 15 minutes. Issued/Revised: 9/1994 TWA: 25 mg/m³ 8 hours. Issued/Revised: 9/1994 TWA: 10 ppm 8 hours. Issued/Revised: 9/1994 **OSHA PEL (United States).** TWA: 25 mg/m³ 8 hours. Issued/Revised: 6/1993 TWA: 10 ppm 8 hours. Issued/Revised: 6/1993 **NIOSH REL (United States).** TWA: 10 ppm 10 hours. Issued/Revised: 6/1994 TWA: 25 mg/m³ 10 hours. Issued/Revised: 6/1994

Section 8. Exposure controls/personal protection

	STEL: 15 ppm 15 minutes. Issued/Revised: 6/1994 STEL: 37 mg/m³ 15 minutes. Issued/Revised: 6/1994

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

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.

Consult your supervisor or Standard Operating Procedure (S.O.P) for special handling instructions.

Body protection

Use of protective clothing is good industrial practice. 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 from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static. When there is a risk of ignition wear inherently fire resistant protective clothes and gloves. 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. 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. 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.

Section 8. Exposure controls/personal protection

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.

In case of insufficient ventilation, wear suitable respiratory equipment.
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.
The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

Appearance

Physical state	Liquid.
Color	Clear Colorless.
Odor	Vinegar [Strong]
Odor threshold	Not available.
pH	2.4 [Conc. (% w/w): 6.006%]
Melting point	May start to solidify at the following temperature: 16.64°C (62°F)
Boiling point	117.9°C (244.2°F)
Flash point	Closed cup: 39°C (102.2°F) [Pensky-Martens.]
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Lower: 4% Upper: 19.9%
Vapor pressure	2.079 kPa (15.635 mm Hg) at 25°C
Vapor density	2.1 [Air = 1]
Density	1044.6 kg/m³ (1.045 g/cm³) at 25°C
Solubility	Miscible in water. (100%)
Solubility	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	-0.17
Auto-ignition temperature	463°C (865.4°F)
Decomposition temperature	Not available.
Viscosity	Kinematic: 1.011 mm^2/s (1.011 cSt) at 25°C

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 heat, sparks and flame. This product should be stored away from oxidizing materials and strong bases.

Incompatible materials
Reactive with metals, oxidizing materials, reducing agents, alkalis and alcohols

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	-

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 Subject: Mammal - species unspecified	Negative	Based on Acetic anhydride
	OECD 473	Experiment: In vitro Subject: Mammal - species unspecified	Negative	-
	OECD 471	Experiment: In vitro Subject: Non-mammalian species	Negative	-
	OECD 474	Experiment: In vivo 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.

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

Ingestion Causes burns to mouth, throat and stomach. Corrosive to the digestive tract. Causes burns.

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.

Section 11. Toxicological information

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

Not available.

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

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 available.

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

Section 12. Ecological information

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 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

	DOT Classification	TDG Classification	IMDG	IATA
UN number	UN2789	UN2789	UN2789	UN2789
UN proper shipping name	Acetic acid, glacial or Acetic acid solution, more than 80 per cent acid, by mass acid solution RQ (Acetic acid)	Acetic acid, glacial or Acetic acid solution, more than 80 per cent acid, by mass acid solution	Acetic acid, glacial or Acetic acid solution, more than 80 per cent acid, by mass acid solution	Acetic acid, glacial or Acetic acid solution, more than 80 per cent acid, by mass acid solution
Transport hazard class(es)	8 (3) 	8 (3) 	8 (3) 	8 (3) 
Packing group	II	II	II	II
Environmental hazards	No.	No.	No.	No.
Additional information	**Reportable quantity** 5000 lbs / 2270 kg [574.07 gal / 2173.1 L] Package sizes shipped in quantities less than the product	-	**Emergency schedules (EmS)** F-E, S-C	-

Section 14. Transport information

	reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. **Limited quantity** Yes. **Packaging instruction** **Passenger aircraft** Quantity limitation: 1 L **Cargo aircraft** Quantity limitation: 30 L			

Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Proper shipping name	Acetic acid.
Ship type	3
Pollution category	Z

Section 15. Regulatory information

U.S. Federal regulations

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

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification Fire hazard
Immediate (acute) health hazard

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

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

Pennsylvania The following components are listed: ACETIC ACID

California Prop. 65 **California Prop 65:** No products were found

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.

Section 15. Regulatory information

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.
REACH Status	The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	3
Flammability	2
Physical hazards	0
Personal protection	X

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

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

History

Date of issue/Date of revision	07/08/2014.
Date of previous issue	07/07/2014.
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 73/78 = 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.

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

Section 16. Other information

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.