

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

1. Identification

- **Product Identifier**
- **Name of the product:** Acetic Acid Glacial
- **CAS No.:** 64-19-7
- **Recommended Use:** Industrial use

- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
Ramsay Browne Chemical & Company
PO Box 6425
Moraga, CA 94570
General Number: (925) 280-1661
- **Emergency telephone number: (925) 280-1661**

2. Hazard(s) Identification

- **Signal Word:** Danger



- **GHS Classifications:**
- **Flammable liquid:** Category 3 [H226]
- **Skin corrosion:** Category 1A [H314]

- **Hazard Statement(s):**
- **H226** – Flammable liquid and vapor
- **H314** – Causes severe skin burns and eye damage

- **Precautionary Statements:**
- **Prevention:**
- **P210** – Keep away from heat, open flames and hot surfaces. No smoking
- **P233** – Keep container tightly closed.
- **P240** – Ground and bond container and receiving equipment

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

2. Hazard(s) Identification (continued)

- **P241+P242** – Use explosion-proof electrical, ventilating, lighting and mixing equipment; use only non-sparking tools
- **P243** – Take precautionary measures against static discharge
- **P260** – Do not breathe vapor, fumes or mist
- **P264** – Wash hands and other skin areas exposed to material thoroughly after handling
- **P280** – Wear protective gloves, protective clothing, eye protection and face protection.

- **Response:**
- **P370+P378** – In case of fire: Use water spray or fog, foam, dry chemical or carbon dioxide for extinction
- **P301+P330+P331+P310** – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor
- **P303+P361+P350** – IF ON SKIN: Remove immediately all contaminated clothing. Rinse skin with water or shower.
- **P304+P340+P310** – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor.
- **P305+P351+P338+P310** – 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 doctor.
- **P363** – Wash contaminated clothing before reuse.
- **P321** – Specific treatment: Contact a POISON CENTER or doctor. Refer to Section 4 of this SDS.

- **Storage:**
- **P405+P403+P233+P235** - Store locked up in a well-ventilated place. Keep container tightly closed. Keep cool

- **Disposal:**
- **P501** – Dispose of contents and containers in accordance with national and local regulations

3. Composition / Information on ingredients

CAS #	Percentage	Chemical Name
64-19-7	>99	Glacial Acetic Acid

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

4. First-aid measures

- **Inhalation:** If product vapor or mist causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight fitting clothing such as a collar, tie, belt or waistband. Seek immediate medical attention.
- **Eyes:** Immediately flush eyes with large amounts of water for 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after the first 2 minutes and continue rinsing. Seek immediate medical attention, preferably from an ophthalmologist.
- **Skin:** Flush skin with large amounts of water while removing contaminated clothing, and continue rinsing for at least 15 minutes. Wash contaminated clothing thoroughly before reuse. Discard contaminated shoes. Seek immediate medical attention.
- **Ingestion:** Rinse mouth with water if the victim is conscious. Remove dentures, if any. Give 2 glasses of water or milk to drink if the victim is conscious, alert and able to swallow. DO NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. To prevent aspiration of swallowed product, lay victim on one side with the head lower than the waist. Obtain medical attention immediately.
- **Potential health symptoms and effects:**
 - **Eyes:** Causes burns serious eye damage. Symptoms may include redness, swelling, pain, tearing, burns, blurred vision, corneal clouding, permanent eye damage and possible blindness. Mist or vapor can cause severe eye irritation and eye damage.
 - **Skin:** Causes severe skin irritation and burns. May be harmful if absorbed through the skin. Contact with skin may cause blackening and hyperkeratosis of the skin and hands.
 - **Inhalation:** Harmful if inhaled. Causes chemical burns to the respiratory tract with mucousal irritation, cough and shortness of breath. Exposure may lead to bronchitis, pharyngitis, edemas in the respiratory tract and dental erosion. Effects may be delayed. May be absorbed through the lungs.
 - **Ingestion:** Harmful if swallowed. Causes burns to the lips, mouth, throat and gastrointestinal tract. May cause severe and permanent damage to the digestive tract. Causes severe pain, nausea, vomiting, diarrhea and shock. May cause damage

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

4. First-aid measures (continued)

to the kidneys and kidney failure. Rapidly absorbed from the gastrointestinal tract. Pulmonary failure is possible after aspiration of vomit.

- **Chronic:** Chronic exposure may cause erosion of dental enamel, bronchitis, eye irritation, darkening of the skin and chronic inflammation of the respiratory tract. May cause occupational asthma. Effects may be delayed. Skin sensitization to acetic acid is rare, but has occurred. Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance.
- **Advice to Doctor and Hospital Personnel:** Treat symptomatically and supportively.

5. Firefighting measures

- **Extinguishable media:**
- **Suitable methods of extinction:** Use extinguishing media such as water, fog or spray, dry chemical, carbon dioxide or foam.
- **Unsuitable methods of extinction: None known.**
- **Special hazards arising from the substance or mixture:** Flammable liquid and vapor. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Vapors are heavier than air and can travel along the ground to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Containers may explode if exposed to fire. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Symptoms of overexposure to these gases may not be apparent. Seek medical advice.
- **Explosion hazards:** Vapor may form an explosive mixture with air at elevated temperatures, especially in confined spaces.
- **Advice for firefighters:** Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. Water contaminated by this material must be contained from being discharged to any waterway, sewer or drain to prevent environmental contamination.

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

6. Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
- Clean up spills immediately.
- Wear appropriate protective clothing designated in Section 8.
- Approach spill from upwind.
- Remove all sources of ignition.
- Ventilate the area.
- Spill creates a slip hazard.
- Environmental precautions:
- Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways.

- **Methods and materials for containment and cleaning up:**
- Cover drains and contain spill.
- Do not flush spill to the drain.
- Carefully neutralize the spill with soda ash (sodium carbonate) or calcium carbonate.
- Cover spill with a large quantity of inert absorbent.
- Do not use combustible material such as sawdust.
- Collect product using non-sparking tools and place into an approved container for proper disposal.
- Do not use a metal container for disposal.
- Observe possible material restrictions (Sections 7 and 10).
- Dispose of via a licensed waste disposal contractor.
- Contaminated absorbent may pose the same hazard as the spilled product.

- **Reference to other sections:**
- See Section 13 for additional waste treatment information.

7. Handling and storage

- **Precautions for safe handling:**
- Wear all appropriate personal protective equipment specified in Section 8.
- Do not get in eyes or on skin or clothing.
- Do not breathe vapor or mist.
- If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator.
- Wash contaminated clothing before reuse.

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

7. Handling and storage (continued)

- Destroy contaminated shoes.
- **Advice on protection against fire and explosion:**
- Keep away from heat and incompatible materials.
- **Conditions for safe storage, including and incompatibilities:**
- Store in original container in a dry, cool, well-ventilated area away from incompatible materials (refer to Section 10) and food and drink.
- Ground and bond containers when transferring material.
- Transfer only to approved containers having correct labeling.
- DO NOT store in metal containers.
- Keep containers tightly closed when not in use.
- Protect container from physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
- Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat or ignition sources.
- Use appropriate containment to avoid environmental contamination.
- Ventilate enclosed areas.
- Do not take internally.
- Keep locked up and out of reach of children.
- **Specific end uses:**
- Apart from the uses mentioned in Section 1, no other specific uses are stipulated.

8. Exposure controls / personal protection

- **Engineering Controls:**
- **Engineering measures:**
- Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable.
- **Individual protection measures:**
- Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

8. Exposure controls / personal protection (continued)

- **Hygiene measures:**
- Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.
- **Eye/face protection:**
- Wear chemical splash goggles or safety glasses with unperforated side shields and a face shield during use.
- **Hand Protection:**
- Wear Chloroprene gloves or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.
- **Skin protection:**
- Wear protective clothing. Wear protective boots if the situation requires.
- **Respiratory protection:**
- Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.
- **Environmental exposure controls:**
- Do not empty into drains.

9. Physical and chemical properties

- **Appearance:** Clean, colorless liquid
- **Odor:** Pungent, vinegar-like
- **Odor Threshold:** 0.23-100.1 ppm
- **Molecular Weight:** 60.05 g/mol
- **Chemical Formula:** C₂H₄O₂
- **pH:** 2.47 (1 M aqueous solution)
- **Freezing/Melting Point, Range:** 17°C (62.6°F)
- **Initial Boiling Point:** 116-118VC (241-244°F)
- **Evaporation Rate:** 0.97 (n-BuOAc = 1)

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

9. Physical and chemical properties (continued)

- **Flammability (solid, gas):** Not applicable
- **Flash Point:** 39°C (102.2°F)
- **Autoignition Temperature:** 516°C (960.8°F)
- **Decomposition Temperature:** No data available
- **Lower Explosive Limit (LEL):** 4% (v)
- **Upper Explosive Limit (UEL):** 19.9% (v)
- **Vapor Pressure:** 15.7 mm Hg @ 25°C
- **Vapor Density:** 2.07 (Air = 1)
- **Specific Gravity:** 1.05 @ 20°C
- **Viscosity:** 1.22 cps @ 20°C
- **Solubility in Water:** Miscible
- **Partition Coefficient: n-octanol/water:** logPow = -0.17 @ 25°C
- **Oxidizing Properties:** Not applicable
- **Explosive Properties:** Not applicable
- **Volatiles by Weight @ 21°C:** 100%
- **Other data:** May be corrosive to metals

10. Stability and reactivity

- **Reactivity:** Stable when used under recommended handling and storage conditions.
- **Chemical stability:** Stable under recommended (ambient) storage conditions.
- **Possibility of hazardous reactions:** Generates hydrogen gas in contact with metals. Hazardous polymerization will not occur.
- **Conditions to avoid:** Heat, flames, sources of ignition and contact with incompatible materials.
- **Incompatible materials:** Strong oxidizing agents, strong alkalis, strong bases, metals, amines, halogens, alcohols, peroxides, peroxi comopounds, metal salts, alcohols, potassium permanganate, acetaldehyde, carbonates, nonmetallic halides. Incompatible with some plastics, rubbers and coatings.
- **Hazardous decomposition products:** Thermal decomposition products include oxides of carbon, hydrogen gas, irritating and toxic fumes.

11. Toxicological information

- **Acute Oral Toxicity:** LD50, rat: 3,310 mg/kg
- **Acute inhalation toxicity:** LC50, rat: 11.40 mg/m³, 4h
- **Acute dermal toxicity:** LC50, rabbit: 1,112 mg/kg

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

11. Toxicological information (continued)

- **Skin irritation/corrosion:** Cause severe skin irritation and burns
- **Eye irritation/corrosion:** Causes burns and permanent eye damage. Risk of blindness.
- **Sensitization:** No data available
- **Genotoxicity in vitro:** No data available
- **Mutagenicity:** No data available
- **Specific organ toxicity – single exposure:** No data available
- **Specific organ toxicity – repeated exposure:** No data available
- **Aspiration hazard:** No data available
- **Further information:** This product contains no substances present at levels greater than or equal to the 0.1% threshold (de minimis) that are identified as a probable, possible, potential or confirmed carcinogens by ACGIH, IARC, NTP or OSHA. No data is available regarding the mutagenicity or teratogenicity of this product, nor is there any available data that indicates it causes adverse developmental or fertility effects.
- Handle in accordance with good industrial hygiene and safety practice.

12. Ecological information

- **Toxicity:** Large discharges of Glacial Acetic Acid to the environment may decrease the pH of aquatic systems to a value <2, which may be fatal to aquatic life and soil micro-organisms.
- **Acute and prolonged toxicity to fish:**
 - LC50 – Lepomis macrochirus (Bluegill/Sunfish), 96h: 75 mg/l
 - LC50 – Pimephales promelas (Fathead minnow), static, 96h: 88 mg/l
- **Acute toxicity to aquatic invertebrates:**
 - EC50 – Daphnia magna (Water flea), 24-48h: 32-47 mg/l
- **Acute and prolonged toxicity to Aquatic plants:**
 - IC50 – Scenedesmus quadricauda (Green algae), 16h: 4,000 mg/l
- **Persistence and degradability:** Readily biodegradable.
- **Bioaccumulation potential:** Product will not bioaccumulate.
- **Mobility in soil:** No data available.
- **Results of PBT and vPvB assessment:** Substance does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII
- **Other adverse effects:**

Additional ecological information: Do not allow material to run into surface waters, wastewater or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

13. Disposal considerations

- **Waste treatment methods:**
- **Methods of disposal:** The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. Avoid dispersal of split material and runoff and contact with soil, waterways, drains and sewers.
- **RCRA P-Series:** No listing
- **RCRA U-Series:** No listing

14. Transport information

- **Note:** Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100-177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.
- **US DOT (Domestic Ground Transportation):**
- **Proper Shipping Name:** Acetic Acid, Glacial
- **Hazard Class:** 8 (3)
- **UN/NA:** UN2789
- **Packing Group:** II
- **NAERG:** Guide #132
- **Packaging Authorization:** Non Bulk: 49 CFR 173.202; Bulk: 173.243
- **Packaging Exceptions:** 49 CFR 173.154
- **IMO/IMDG (Water Transportation):**
- **Proper Shipping Name:** Acetic Acid, Glacial
- **Hazard Class:** 8 (3)
- **UN/NA:** UN2789
- **Packing Group:** II
- **Marine Pollutant:** No
- **EMS Number:** F-E, S-C

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

14. Transport information (continued)

- **ICAO/IATA (Air Transportation):**
- **Proper Shipping Name:** Acetic Acid, Glacial
- **Hazard Class:** 8 (3)
- **UN/NA:** UN2789
- **Packing Group:** II
- **Quantity Limitations:** 49 CFR 173.27 and 175.57 – Cargo Aircraft Only: 30 I; Passenger Aircraft: 1 I

- **RID/ADR (Rail Transportation):**
- **Proper Shipping Name:** Acetic Acid, Glacial
- **Hazard Class:** 8 (3)
- **UN/NA:** UN2789
- **Packing Group:** II

15. Regulatory information

- **Safety, health and environmental regulations/legislation specific for substance or mixture:**
- **U.S.Federal Regulations:**
- **OSHA Hazard Communication Standard:** This substance is classified as hazardous in accordance with OSHA 29 CFR 1910-1200
- **OSHA Process Safety Management Standard:** This product is not regulated under OSHA PSM Standard 29 CFR 1910.119
- **EPA Risk Management Planning Standard:** This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68
- **EPA Federal Insecticide, Fungicide and Rodenticide Act:** This product is not a registered Pesticide under the FIFRAm 40 CFR Part 150
- **Toxic Substance Control Act (TSCA) Inventory:** This substance is listed on the TSCA Inventory. It is not subject to TSCA 12(b) Export Notification.
- **Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.4(f)(2) and Chemical Code Number:** Not listed
- **Drug Enforcement Administration (DEA) List s1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12©) and Code Number:** Not listed
- **Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals:** Not listed

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

15. Regulatory information (continued)

- **Superfund Amendments and Reauthorization Act (SARA):**
- **SARA 311/312 Hazard Categories:** Fire Hazard, Acute Health Hazard, Chronic Health Hazard
- **SARA 313 Information:** None of the components of the product exceed the threshold (de minimis) reporting requirements of Section 13 of the Emergency Planning and Community Right-to Know Act of 1986.
- **SARA 302/304 Extremely Hazardous Substances:** None of the components of the product exceed the threshold (de minimis) reporting levels established by any of these sections of Title III of SARA
- **SARA 302/304 Emergency Planning & Notification:** None of the components of the product exceed the threshold (de minimis) reporting level established by any of these sections of Title III of SARA.

- **Comprehensive Response Compensation and Liability Act (CERCLA):** This product contains the following CERCLA reportable substance(s): Acetic Acid (CAS#64-19-7), RQ – 2,267.96 kg (5,000 lbs)

- **Clean Air Act (CAA):** This product does not contain any chemicals listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b). This product does not contain any Class 1 Ozone depleters. This product does not contain any Class 2 Ozone depleters.

- **Clean Water Act (CWA):** Acetic Acid (CAS#64-19-7) is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

- **U.S. State Regulations:**
- California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains no chemical(s) known to the State of California to cause cancer, birth defects or other reproductive harm.
- **Other U.S. State Inventories:** Glacial Acetic Acid (CAS#64-19-7) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, FL, ID, MA, MN, NC, NJ, NY, PA, RI, WA, WI.

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

16. Other information

Hazardous Material Information System (HMIS)

Acetic Acid, Glacial	
HEALTH	3
FIRE	2
REACTIVITY	0
PERSONAL PROTECTION	C

HMIS Hazard Rating Legend:

0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe * = Chronic Health Hazard

Abbreviation Key:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)
CAS: Chemical Abstract Services
CFR: Code of Federal Regulations
DOT: Department of Transportation
EMS Guide: Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA: Environmental Protection Agency
ERG: Emergency Response Guide Book
FDA: Food and Drug Administration
GHS: Globally Harmonized System of Classification and Labeling of Chemicals (GHS)
HCS: Hazard Communication Standard
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association half maximal
ICAO: International Civil Aviation Organization
IDLH: Immediately Dangerous to Life and Health
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
mppcf: Millions of Particles Per Cubic Foot
NA: North America
NAERG: North American Emergency Response Guide Book
NIOSH: National Institute for Occupational Safety
NTP: National Toxicology Program

Safety Data Sheet (SDS)

Acetic Acid, Glacial

Issue date 11/17/2014

Reviewed on 09/25/2018

16. Other information (continued)

OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulating and Toxic
PEL: Permissible exposure limit
PMCC: Pensky-Martens Closed Cup
Ppm: Parts Per Million
RCRA: Resource Conservation and Recovery Act
RID: Dangerous Goods by Rail
RQ: Reportable Quantity
TCC/Tag: Tagliabue Closed Cup
TLV: Threshold Limit Value
TSCA: Toxic Substance Control Act
TWA: Time-weighted Average
UN: United Nations
VOC: Volatile Organic Compounds
vPvB: Very Persistent and Very Bioaccumulating
WHMIS: Workplace Hazardous Materials Information System

Disclaimer of Responsibility:

The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume damage or expense arising out of or in any way responsibility and expressly disclaim liability for loss, connected with handling, storage, use or disposal of this product. If the product is used as a component in another product, this SDS information may not be applicable.