# MATERIAL SAFETY DATA SHEET

**Acetic Acid Glacial**

## Section 1 - Chemical Product and Company Identification

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| **MSDS Name:** | **Acetic acid glacial** |
| **Synonyms:** | Glacial acetic acid |

| | |
|---|---|
| Company Identification: (INDIA) | DS Global Venture, [Registered office address], INDIA |
| For information in the INDIA, call: | Tel: +91 98933 53200<br>Email: [Email address] |

## Section 2 - Composition, Information on Ingrédients

| CAS# | Chemical Name: | % | EINECS# |
|---|---|---|---|
| 64-19-7 | Acetic acid glacial | | 200-580-7 |
| | | | |

| | |
|---|---|
| **Hazard Symbols:** | C |
|  | |
| **Risk Phrases:** | 10 35 |

## Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

*Flammable. Causes severe burns.*

### Potential Health Effects

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| **Eye:** | Causes severe eye burns. Contact with liquid or vapor causes severe burns and possible irreversible eye damage. May cause redness, pain, blurred vision and possible eye damage. |
| **Skin:** | May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Causes severe burns with delayed tissue destruction. Causes redness and pain. |
| **Ingestion:** | May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause diarrhea and labored breathing. |
| **Inhalation:** | Effects may be delayed. May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. Causes chemical burns to the respiratory tract. |
| **Chronic:** | Prolonged or repeated skin contact may cause dermatitis. Repeated inhalation may cause chronic bronchitis. Repeated exposure may cause erosion of teeth. |

## Section 4 - First Aid Measures

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| **Eyes:** | Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately. |
| **Skin:** | Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. |
| **Ingestion:** | Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately. |
| **Inhalation:** | Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. |
| **Notes to Physician:** | Treat symptomatically and supportively. |

## Section 5 - Fire Fighting Measures

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| **General Information:** | As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Will burn if involved in a fire. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air. Flammable liquid and vapor. |
| **Extinguishing Media:** | Use foam, dry chemical, or carbon dioxide. |

## Section 6 - Accidental Release Measures

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| **General Information:** | Use proper personal protective equipment as indicated in Section 8. |
| **Spills/Leaks:** | Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Use water spray to dilute spill to a non-flammable mixture. Avoid runoff into storm sewers and ditches which lead to waterways. Remove all sources of ignition. Use a spark-proof tool. Do not let this chemical enter the environment. Carefully neutralize the dilute spill with lime slurry, soda ash, limestone, caustic soda or other alkaline material. |

## Section 7 - Handling and Storage

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| **Handling:** | Use with adequate ventilation. Use spark-proof tools and explosion proof equipment. Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Take precautionary measures against static discharges. Keep away from heat, sparks and flame. Do not ingest or inhale. Use only in a chemical fume hood. |
| **Storage:** | Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Corrosives area. Store in a suitable container in a dry area above the substance's freezing point. Keep away from strong bases. Do NOT freeze. |

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## Section 8 - Exposure Controls, Personal Protection

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| **Engineering Controls:** | |
| | Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels. |
| **Exposure Limits** | **CAS# 64-19-7:** |
| | United States OSHA: 10 ppm TWA; 25 mg/m3 TWA<br>Belgium - TWA: 10 ppm VLE; 25 mg/m3 VLE Belgium - STEL: 15 ppm VLE; 38 mg/m3 VLE<br>France - VLE: 10 ppm VLE; 25 mg/m3 VLE<br>Germany: 10 ppm TWA; 25 mg/m3 TWA<br>Japan: 10 ppm OEL; 25 mg/m3 OEL<br>Malaysia: 10 ppm TWA; 25 mg/m3 TWA<br>Netherlands: 10 ppm MAC; 25 mg/m3 MAC |
| Spain: | 10 ppm VLA-ED; 25 mg/m3 VLA-ED Spain: 15 ppm VLA-EC; 37 mg/m3 VLA-EC |

### Personal Protective Equipment

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| **Eyes:** | Wear chemical splash goggles. |
| **Skin:** | Wear appropriate protective gloves to prevent skin exposure. |
| **Clothing:** | Wear appropriate protective clothing to prevent skin exposure. |
| **Respirators:** | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |

## Section 9 - Physical and Chemical Properties

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| **Physical State:** | Clear liquid |
| **Color:** | APHA: 10 max |
| **Odor:** | pungent odor |
| **pH:** | 2.5 (10 g/L aq.sol.) |
| **Vapor Pressure:** | 1.52kPa @20 deg C |
| **Viscosity:** | 1.53 mPa s @25 deg C |
| **Boiling Point:** | 117 - 118 deg C @760mmHg |
| **Freezing/Melting Point:** | 16 - 16.5 deg C |
| **Autoignition Temperature:** | 427 deg C ( 800.60 deg F) |
| **Flash Point:** | 40 deg C ( 104.00 deg F) |
| **Explosion Limits: Lower:** | 4 Vol % |
| **Explosion Limits: Upper:** | 19.9 Vol % |
| **Decomposition Temperature:** | Not available |
| **Solubility in water:** | Miscible |
| **Specific Gravity/Density:** | 1.048 |
| **Molecular Formula:** | C2H4O2 |
| **Molecular Weight:** | 60.04 |

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## Section 10 - Stability and Reactivity

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| **Chemical Stability:** | Stable at room temperature in closed containers under normal storage and handling conditions. Hygroscopic: absorbs moisture or water from the air. |
| **Conditions to Avoid:** | Incompatible materials, ignition sources, excess heat. |
| **Incompatibilities with Other Materials** | Metals, strong oxidizing agents, strong bases, amines, ammonium nitrate, chlorine trifluoride, iron, nitric acid, permanganates, sodium peroxide, hydrogen peroxide, acetaldehyde, acids (mineral, oxidizing, e.g. chromic acid, hypochlorous acid, nitric acid, sulfuric acid), caustics (e.g. ammonia, ammonium hydroxide, calcium hydroxide, potassium hydroxide, sodium hydroxide), chlorosulfonic acid, oleum, bromine pentafluoride, perchloric acid, potassium tert-butoxide. |
| **Hazardous Decomposition Products** | Carbon monoxide, carbon dioxide. |
| **Hazardous Polymerization** | Will not occur. |

## Section 11 - Toxicological Information

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| **RTECS#:** | CAS# 64-19-7: AF1225000 |
| **LD50/LC50:** | RTECS:<br>**CAS# 64-19-7:** Draize test, rabbit, skin: 50 mg/24H Mild;<br>Inhalation, mouse: LC50 = 5620 ppm/1H;<br>Oral, rat: LD50 = 3310 mg/kg;<br>Skin, rabbit: LD50 = 1060 uL/kg;<br>Other: Inh rat LC50 = 11.4 mg/L/4H |
| **Carcinogenicity:** | Acetic acid glacial-Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65. |
| **Other:** | See actual entry in RTECS for complete information. |

## Section 12 - Ecological Information

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| **Ecotoxicity:** | Daphnia: EC50: 95 mg/l; 24H; .<br>Fish: Pimephals prome: LC50: 88 mg/l; 96H; .<br>Fish: Rainbow trout: LC100: >315 mg/l; 24H; .<br>Algae: 4000 mg/L; 7D; IC10<br>Fish: Bluegill/Sunfish: 75 mg/L; 96H; LC50<br>Algae: 156 mg/L; 24H; EC50 |
| **Other:** | Biodegradable. Do not empty into drains.<br>Log Pow = -0.2BCF < 1Biodegradibility: 99% / 30D |

## Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

## Section 14 - Transport Information

| | IATA | IMO | RID/ADR |
|---|---|---|---|

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|---|---|---|---|
| **Shipping Name:** | ACETIC ACID, GLACIAL | ACETIC ACID, GLACIAL | ACETIC ACID, GLACIAL |
| **Hazard Class:** | 8 (3) | 8 (3) | 8 (3) |
| **UN Number:** | 2789 | 2789 | 2789 |
| **Packing Group:** | II | II | II |

USA RQ: CAS# 64-19-7: 5000 lb final RQ; 2270 kg final RQ

## Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

**Hazard Symbols**: C

**Risk Phrases:**

- R 10 Flammable.
- R 35 Causes severe burns.

**Safety Phrases:**

- S 23 Do not inhale gas/fumes/vapour/spray.
- S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**WGK (Water Danger/Protection)**

- CAS# 64-19-7: 1

**Canada**

- CAS# 64-19-7 is listed on Canada's DSL List

**US Federal**

- TSCA
- CAS# 64-19-7 is listed on the TSCA Inventory

## Section 16 - Other Information

| | |
|---|---|
| **MSDS Creation Date:** | July 22, 2015 |
| **Revision #2 Date** | |

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