

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

Manufactured by: Millenia Productions. P.O. Box 48025, Wichita, KS 67214

Trade Name: Acetone

Information: (316) 425-2500

Date Prepared: 03/26/96

II. COMPOSTION/INFORMATION ON INGREDIENTS

Substances listed below are reportable hazardous ingredients as defined by the OSHA Hazard Communication Standard. Exposure limits, when available, are also listed.

Additional compositional data are provided in Section 15, REGULATORY INFORMATION, subject to supplier notification requirements.

| CAS NUMBER | OSHA | UNITS | ACGIH | UNITS |
|----------------------|--------|----------|--------|----------|
| CHEMICAL NAME | | | | |
| 67-64-1 | | | | |
| Acetone | 750.0 | ppm PEL | 750.0 | ppm TLV |
| | 1000.0 | ppm STEL | 1000.0 | ppm STEL |

III. HAZARDOUS INGREDIENTS:

EMERGENCY OVERVIEW: Colorless liquid with mild odor. Extremely flammable liquid and vapor. Eye, skin, and mucous membrane irritant. Harmful if swallowed or inhaled.

POTENTIAL HEALTH EFFECTS

EYE: Severe eye irritant. Causes chemical burns.

SKIN: May cause skin irritation or rash.

INGESTION: Ingestion results in mucous membrane irritation. Poisoning may result in hyperglycemia and liver and kidney damage.

INHALATION: Vapor concentrations >1000 ppm are irritating to the respiratory tract, may cause headaches and dizziness, are anesthetic, may cause liver disorder and may have other central nervous system effects.

CHRONIC/ CARCINOGENICITY:

NTP: Not Tested

OSHA: Not Regulated

IARC: Not Listed

CHRONIC/ OTHER: Continuous inhalation of acetone vapors can lead to dizziness and respiratory tract irritation. Accumulates in the body after repeated high doses.

MEDICAL RESTRICTIONS: Certain skin sensitive individuals and individuals with respiratory impairments may be affected by exposure to this product.

IV. FIRST AID MEASURES

EYES:

Flush eyes well with copious quantities of water or normal saline for at least 20-30 minutes. If irritation persists, seek medical attention.

SKIN:

Immediately flush with water for at least 15 minutes. If irritation develops, seek medical attention. Remove contaminated clothing immediately.

INHALATION:

If inhaled, move victim to fresh air and seek medical attention. If not breathing, start CPR and immediately seek medical attention.

INGESTION:

Immediately contact poison control center, hospital, or physician. If unconscious, insure that airway is not obstructed. Begin CPR if not breathing. If conscious, give victim one glass of water. Do not induce vomiting unless instructed to do so. Do not give anything by mouth to a person who is unconscious or is having convulsions.

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| V. FIRE FIGHTING MEASURES |
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EXTINGUISHING MEDIA:

Dry Chemical, foam, water spray, carbon dioxide.

FIRE FIGHTING PROCEDURES:

This product presents an extreme fire hazard. Liquid very quickly evaporates and forms vapor which can catch fire and burn with explosive violence. Approved pressure demand breathing apparatus and protective clothing should be used for all fires. Use extinguishing water stream carefully until well after fire has been extinguished. Isolate for 1/2 mile in all directions of fire involved storage tank, rail car, or tank truck.

HAZARDOUS COMBUSTION PRODUCTS: Hazardous combustion products may include intense heat, dense black smoke, carbon monoxide, carbon dioxide and hydrocarbon fragments.

FLASH POINT: -20 C (-4 F) - (closed cup)

LOWER FLAMMABLE LIMIT: 2.5%

UPPER FLAMMABLE LIMIT: 12.8%

AUTOIGNITION: 465 C (869 F)

CONDITIONS OR FLAMMABILITY: The liquid and vapor are easily ignited by spark or continuous flame and are extremely flammable. Vapors are heavier than air and may travel considerable distances to an ignition source.

EXPLOSION DATA:

IMPACT SENSITIVITY: Not sensitive to mechanical impact.

STATIC DISCHARGE: Vapors from acetone are heavier than air and are sensitive to static discharge.

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| VI. ACCIDENTAL RELEASE MEASURES |
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GENERAL:

Notify safety personnel. Remove all heat and ignition sources. Provide maximum ventilation. Evacuate all personnel from the area except those involved in cleanup. Contain spill. Remove leaking container to safe place if feasible. Prevent runoff to waterways. Absorb small spills with absorbent material and transfer to closed, impervious containers for disposal. For large spills, dike far ahead of spill for later disposal. Cleanup personnel should wear respiratory equipment and protective clothing to prevent inhalation of vapor and contact with skin and eyes.

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| VII. HANDLING AND STORAGE |
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HANDLING:

Follow recommendations on label and in technical literature. Prevent any contact with skin and eyes. Recommend presence of safety showers and eye wash fountains. Minimize prolonged or repeated breathing of vapors mists or fumes. Provide adequate ventilation. Employ bonding, grounding, venting, and explosion relief provisions in accordance with accepted engineering practices.

STORAGE:

Store closed, labeled containers in a cool, dry, well-ventilated area away from sources of heat and ignition. Protect containers from physical damage. Recommend safety showers and eye washes in storage area. Maintain good housekeeping. Employ bonding, grounding, venting and explosion relief provisions in accord with accepted engineering practices.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Ventilation requirements must be locally determined to limit exposure to processing fumes in the workplace. Design techniques and guidelines may be found in publications such as:

Industrial Ventilation; available from the American Conference of Government Industrial Hygienists, Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI 48901.

EYE/FACE: Wear chemical goggles or goggles and full face shield

SKIN: When handling avoid contact with skin. Use appropriate protective clothing, including chemical resistant gloves. For prolonged or repeated contact or for spills, use impervious clothing such as full wet suit and rubber boots.

RESPIRATORY: When exposures are not adequately controlled, use respirator approved for protection from organic vapors. For spills, use approved pressure demand breathing apparatus.

IX. PHYSICAL DATA

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| PHYSICAL STATE: | Liquid |
| ODOR AND APPEARANCE: | Liquid with Mild odor |
| BOILING POINT: | 56 C (133 F) |
| MELTING POINT: | -95 C (-139 F) |
| VAPOR PRESSURE (mmHg): | 184 (20 C) |
| VAPOR DENSITY (air=1): | 2 |
| SPECIFIC GRAVITY (water=1): | 0.79 |
| WATER SOLUBILITY: | Soluble |
| % VOLATILES: | 100 |
| pH: | Not Applicable |
| ODOR THRESHOLD: | 20.0 ppm |
| EVAPORATION RATE: | Not Established |
| COEFFICIENT WATER/OIL DISTR: | Not Established |

X. STABILITY & REACTIVITY

STABILITY:

Stable under recommended conditions of storage and handling.

CONDITIONS TO AVOID:

Avoid exposure to high temperatures, flames, sparks, hot surfaces or other ignition sources. Avoid contact with strong oxidizing agents and halogens.

REACTIVITY:

Not reactive under recommended conditions of handling and storage.

HAZARDOUS DECOMPOSITION:

Thermal decomposition can produce carbon monoxide and carbon dioxide.

XI. TOXICOLOGICAL INFORMATION

PRODUCT:

EYE: Severe eye irritant. Causes chemical burns.

SKIN: Dermal LD50 (rabbit) 20 g/kg

ACUTE ORAL: Oral LD50 (rat) 5800 mg/kg, oral LD50 (mouse) 3000 mg/kg

ACUTE INHALATION: Inhalation LC50 (rat) 16,000 ppm/4 hours.

CHRONIC: Poisoning may result in hyperglycemia, and liver and kidney damage. Prolonged exposure to vapors may cause corneal opacity or result in acetone in the blood. Prolonged or repeated skin contact may defat the skin and produce dermatitis. Over exposure will result in CNS depression.

XII. ECOLOGICAL INFORMATION

GENERAL:

A concentration of 14,250 ppm in tap water, over a 24 hour period was found to be lethal to sunfish. The TLm (median tolerance limit) over 48 hours for mosquito fish is 13,000 ppm in turbid water.

XIII. DISPOSAL INFORMATION

RCRA HAZARDOUS WASTE:

Regulated as RCRA hazardous waste U002 when discarded.

WASTE DISPOSAL:

Recycling is encouraged. Place in tightly sealed, labeled containers for disposal by licensed contractor or burn in an approved incinerator in accordance with federal, state, and local requirements.

XIV. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Acetone
IDENTIFICATION NUMBER: P.I.N. UN1090
TDGA: Regulated. TDG classification: 3.1 Flammable liquid.

XV. REGULATORY INFORMATION

Listed below are chemical substances subject to supplier notification requirements. The percentages, when present, represent average values.

| CAS NUMBER | EPCRA 313% | WHMIS % | NPRI % | CA-65 % | FL | RI |
|--------------------|---------------|------------|-----------|------------|----|----|
| 67-64-1 Acetone | | 99.9 | 99.9 | | x | x |

TSCA STATUS:

Substance Inventory requirements of the US EPA Toxic Substances Control Act (TSCA)

WHMIS CLASSIFICATIONS:

B2- Flammable Liquids

XVI. OTHER INFORMATION

The above information and recommendations are believed accurate and reliable. Because it is not possible to anticipate all conditions of use additional safety precautions may be required. GENERAL ELECTRIC COMPANY makes no warranty, either express or implied, including merchantability and fitness.

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it into individual site safety programs in accordance with applicable hazard communication standards and regulations.

ABBREVIATIONS:

ACGIH: American Conference of Governmental Industrial Hygienists
CA-65: California Proposition 65 (Safe Drinking Water & Toxic Enforcement Act)
CAS#: Chemical Abstracts Service Number
EPCRA 313: Emergency Planning and Community Right-To-Know Act, Section 313
FL: Florida Right-To-Know
OSHA: The Occupational Safety and Health Administration
NPRI: The Canadian National Pollutant Release Inventory
RCRA: Resource Conservation and Recovery Act
RI: Rhode Island Right-To-Know Law, Hazardous Substance List.
WHMIS: Canadian Workplace Hazardous Materials Information System

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Acetone