# Material Safety Data Sheet

## Acetone

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### **PRODUCT NAME:** Acetone

## **OTHER/GENERIC NAMES:** Acetone NF, 2-Propanone, Diethyl Ketone Dimethylketal, Dimethylformaldehyde Pyroacetic acid, Pyroacetic ether

**PRODUCT USE:** Solvent

MANUFACTURER: Honeywell, Burdick & Jackson 1953 South Harvey Street Muskegon, MI 49442

### FOR MORE INFORMATION CALL:

(Monday-Friday, 8:00am-5:00pm) 1-800-368-0050

### **IN CASE OF EMERGENCY CALL:**

(24 Hours/Day, 7 Days/Week) 1-800-707-4555 or Chemtrec 1-800-424-9300

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

### INGREDIENT NAME

Acetone

**<u>CAS NUMBER</u>** <u>W</u> 67-64-1

WEIGHT % 100%

Additional material names not listed above may also appear in Section 15 toward the end of the MSDS. These materials may exist in trace amounts at the part-per-million level, and may be listed for local "Right-To-Know" compliance and for other regulatory reasons.

### 3. HAZARDS IDENTIFICATION

### **EMERGENCY OVERVIEW:**

Flammable liquid and vapor. Clear, colorless liquid possessing a sweet, pungent odor. Volatile substance. Eye, skin and mucous membrane irritant. Harmful if swallowed or inhaled.

### POTENTIAL HEALTH HAZARDS

**SKIN:** Repeated and/or prolonged contact of the liquid or vapor can cause irritation, dryness and erythema.

**EYES:** Irritating to the eyes and mucous membranes.

**INHALATION:** Can cause irritation of eyes, nose and throat. Prolonged exposure can cause headache, nausea, confusion, drowsiness, convulsions and coma.

**INGESTION:** Ingestion can cause gastroenteric irritation, narcosis and injury to the kidneys and liver.

**DELAYED EFFECTS:** Not known to produce chronic or cumulative systemic effects

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### Ingredients found on one of the OSHA designated carcinogen lists are listed below.

#### **INGREDIENT NAME**

NTP STATUS IARC STATUS OSHA LIST

No ingredients listed in this section

### 4. FIRST AID MEASURES

**SKIN:** Immediately rinse affected area with plenty of water for 15 minutes. Get medical assistance.

EYES: Immediately flush eyes with large amounts of water 15-20 minutes. Get immediate medical attention.

**INHALATION:** Remove from exposure area to fresh air. If victim is not breathing administer artificial respiration according to your level of training and obtain professional medical assistance immediately.

**INGESTION:** If swallowed, do not induce vomiting unless advised to do so by a physician.

**ADVICE TO PHYSICIAN** A. Treatment of severe systemic intoxication (narcosis) from either vapor exposure or ingestion is primarily supportive. Acetone has minimal toxicity on other organ systems and if the victim can be supported through the period of central nervous system depression and respiratory failure, the prognosis is good.

(1) Following recent ingestion, acetone may be removed by gastric lavage. Emesis is not recommended. Activated charcoal is recommended.

- (2) Mechanically assisted ventilation may be necessary.
- (3) Treat symptomatically and monitor blood glucose.

B. Eye exposures usually do not require any specific treatment if liquid acetone is promptly washed out of eyes. If exposure was prolonged, some initial corneal damage may be present. It is advisable for these individuals to be seen by an opthamologist.

### 5. FIRE FIGHTING MEASURES

#### **FLAMMABLE PROPERTIES**

FLASH POINT:
FLASH POINT METHOD:
<b>AUTOIGNITION TEMPERATURE:</b>
UPPER FLAME LIMIT (volume % in air):
LOWER FLAME LIMIT (volume % in air):
FLAME PROPAGATION RATE (solids):
OSHA FLAMMABILITY CLASS:

-4°F (-20°C) Closed Cup 869°F (465°C) 13% v/v 2.5%v/v Not Applicable IB

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### **EXTINGUISHING MEDIA:**

Carbon dioxide, dry chemical or alcohol type foam.

### **UNUSUAL FIRE AND EXPLOSION HAZARDS:**

Extremely flammable and its vapors from explosive mixtures with air. Dangerous when exposed to heat, sparks, flame or oxidants.

### SPECIAL FIRE FIGHTING PRECAUTIONS/INSTRUCTIONS:

Handle as a very flammable liquid. Use water spray to keep fire-exposed tanks and containers cool. Do not enter the fire area without proper personal protective equipment, including self-contained breathing apparatus.

### 6. ACCIDENTAL RELEASE MEASURES

**IN CASE OF SPILL OR OTHER RELEASE:** (Always wear recommended personal protective equipment.)

Eliminate sources of ignition. Isolate the spill area. Stop leak in a safe and practical manner. (If leak cannot be stopped easily and safely, advise trained emergency response personnel of the situation.) Using inert material (such as ground corncobs) dike the spilled solvent to prevent it from running into drains or waterways.

## Spills and releases may have to be reported to Federal and/or local authorities. See Section 15 regarding reporting requirements.

### 7. HANDLING AND STORAGE

### **NORMAL HANDLING:** (Always wear recommended personal protective equipment.)

Flammable liquid and vapors. Keep container closed. Do not breathe vapors. Avoid contact with skin, eyes and mucous membranes. Keep away from heat, sparks and flame. Electrically ground all handling equipment. Wash contaminated clothing and protective equipment before reuse.

### **STORAGE RECOMMENDATIONS:**

Store in an area designed for storage of flammable liquids. (OSHA 29 CFR 1910.106) Protect from temperature extremes and sunlight, and store away from incompatible substances and in accordance with 29 CFR 1910.106. Avoid acids, bases, oxidizers, explosives, nitrogen-fluorine compounds, sulfites, perchlorates, reducing agents and plastics.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **ENGINEERING CONTROLS:**

Provide general or local exhaust ventilation systems to maintain airborne concentrations below exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

#### PERSONAL PROTECTIVE EQUIPMENT SKIN PROTECTION:

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Where liquid contact is possible, minimum personal protective equipment should be full face shield, impervious gloves and apron. Routine product handling can be accomplished in goggles or safety glasses, long sleeved shirt, gloves, and trousers. Safety-toed shoes should be worn when handling drums.

### **EYE PROTECTION:**

Full face shield recommended for conditions where liquid contact is possible. Contact lens should not be worn when working with this chemical.

### **RESPIRATORY PROTECTION:**

Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (*29 CFR 1910.134*) and, if necessary, wear a MSHA/NIOSH-approved respirator. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

### **ADDITIONAL RECOMMENDATIONS:**

Provide eyewash station and safety showers convenient to work areas. Do not eat, drink or smoke in work areas.

### **EXPOSURE GUIDELINES**

INGREDIENT NAME	ACGIH TLV	<b>OSHA PEL</b>	<b>OTHER LIMIT</b>
Acetone	750 ppm TWA	750 ppm TWA	100 mg/L(in urine,
	1000 ppm STEL	1000 ppm STEL	end of shift)

\* = Limit established by Honeywell International, Inc.

\*\* = Workplace Environmental Exposure Level (AIHA).

\*\*\* = Biological Exposure Index (ACGIH).

### **OTHER EXPOSURE LIMITS FOR POTENTIAL DECOMPOSITION PRODUCTS:** None known

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Clear. colorless **PHYSICAL STATE:** Liquid 58.08 **MOLECULAR WEIGHT: CHEMICAL FORMULA:** C<sub>3</sub>H<sub>6</sub>O Sweet mint-like odor detectable at 20 ppm **ODOR: SPECIFIC GRAVITY (water = 1.0):** 0.79 **SOLUBILITY IN WATER (weight %):** Complete pH: Not Applicable 133°F (56°C) **BOILING POINT: MELTING POINT:** -94.8°C **VAPOR PRESSURE:** 180 mm Hg at 20°C VAPOR DENSITY (air = 1.0): 2.0 **EVAPORATION RATE:** 12 **COMPARED TO:** Butyl Acetate = 1

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#### % VOLATILES: FLASH POINT:

100 -4°F (-20°C)

(Flash point method and additional flammability data are found in Section 5.)

### **10. STABILITY AND REACTIVITY**

### NORMALLY STABLE? (CONDITIONS TO AVOID):

Product is stable at ambient room temperature in closed containers. Keep away from heat, sparks and flame.

### **INCOMPATIBILITIES:**

Acids and oxidizers.

### CONDITIONS TO AVOID: Heat, sparks and flame. Direct sunlight.

### HAZARDOUS DECOMPOSITION PRODUCTS:

Complete combustion results in the formation of carbon dioxide and water vapor. Incomplete combustion can produce carbon monoxide and other toxic oxides of carbon.

### HAZARDOUS POLYMERIZATION:

Will not occur.

### **11. TOXICOLOGICAL INFORMATION**

### **IMMEDIATE (ACUTE) EFFECTS:**

Oral (rat)  $LD_{50} = 5800 \text{ mg/kg}$ Oral (mouse)  $LD_{50} = 3000 \text{ mg/kg}$ Oral (rabbit)  $LD_{50} = 5340 \text{ mg/kg}$ Skin (rabbit) = 500 mg/24 hr. Mild reaction. Eye (human) = 500 ppm

### DELAYED (SUBCHRONIC AND CHRONIC) EFFECTS:

No data available. Acetone is not known to produce chronic or cumulative systemic effects.

### **OTHER DATA:**

Biological Action Level: 270 mg/L in urine at end of work shift = excessive exposure to acetone.

### **12. ECOLOGICAL INFORMATION**

 $LC_{50}$  (rainbow trout) = 5,540 mg/L/96 hr. Tlm (Daphnia) = 10 mg/L/48 hr. Octanol/Water Partition Coefficient: 0.58

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### **13. DISPOSAL CONSIDERATIONS**

### <u>RCRA</u>

**Is the unused product a RCRA hazardous waste if discarded?** Yes **If yes, the RCRA ID number is:** U002 and D001

### **OTHER DISPOSAL CONSIDERATIONS:**

Disposition must be in accordance with all applicable local, state, and federal regulations.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

### **14. TRANSPORT INFORMATION**

US DOT PROPER SHIPPING NAME:	Acetone
US DOT HAZARD CLASS:	3, Flammable Liquid
US DOT ID NUMBER:	UN 1090
US DOT PACKING GROUP:	II
NA EMERGENCY RESPONSE GUIDE:	127

For additional information on shipping regulations affecting this material, contact the information number found in Section 1.

### **15. REGULATORY INFORMATION**

### TOXIC SUBSTANCES CONTROL ACT (TSCA)

**TSCA INVENTORY STATUS:** Acetone is listed on TSCA inventory.

**OTHER TSCA ISSUES:** Subject to export notification.

### SARA TITLE III/CERCLA

"Reportable Quantities" (RQs) and/or "Threshold Planning Quantities" (TPQs) exist for the following ingredients.

INGREDIENT NAME	SARA/CERCLA RQ (lb)	<u>SARA EHS TPQ (lb)</u>
Acetone	5000	None

Spills or releases resulting in the loss of any ingredient at or above its RQ requires immediate notification to the National Response Center [(800) 424-8802] and to your Local Emergency Planning Committee.

SECTION 311 HAZARD CLASS: Immediate. Fire.

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### SARA 313 TOXIC CHEMICALS:

The following ingredients are SARA 313 "Toxic Chemicals". CAS numbers and weight percents are found in Section 2.

### **INGREDIENT NAME**

No ingredients listed in this section

### STATE RIGHT-TO-KNOW

In addition to the ingredients found in Section 2, the following are listed for state right-to-know purposes.

### **INGREDIENT NAME**

No ingredients listed in this section.

WEIGHT % COMMENT None.

**COMMENT** 

### **ADDITIONAL REGULATORY INFORMATION:**

Acetone is subject to the Chemical Diversion & Trafficking Act of 1988 and subject to certain recordkeeping and reporting requirements. (21 CFR 1310 and 1313). Acetone is not regulated as a VOC under the Clean Air Act.

### WHMIS CLASSIFICATION (CANADA):

Class B, Division 2

### FOREIGN INVENTORY STATUS:

Canadian DSL (Domestic Substances List) EINECS (European Inventory of Existing Commercial Chemical Substances) Australian Inventory. Japanese Inventory

### **16. OTHER INFORMATION**

### CURRENT ISSUE DATE: June, 2000

**PREVIOUS ISSUE DATE:** October, 1995 August, 1997, December, 1997

**CHANGES TO MSDS FROM PREVIOUS ISSUE DATE ARE DUE TO THE FOLLOWING:** New format. **Repagination in sections 3, 4, and 9. New header and footer information.** 

NFPA Classification		
Health:	2	
Flammability:	3	
Reactivity:	0	