

**Acetone****AH010-4**

Version 1.7

Revision Date 05/07/2019

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**SECTION 1. IDENTIFICATION**

Product name : Acetone

Number : 000000011300

Product Use Description : Solvent

Manufacturer or supplier's details : Honeywell International Inc.  
1953 South Harvey Street  
Muskegon, MI 49442

For more information call : 1-800-368-0050  
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

**In case of emergency call : Medical: 1-800-498-5701 or +1-303-389-1414**  
**: Transportation (CHEMTREC): 1-800-424-9300 or**  
**+1-703-527-3887**  
:  
: (24 hours/day, 7 days/week)

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Form : liquid, clear

Color : colourless

Odor : sweet mint-like

**Classification of the substance or mixture**

Classification of the substance or mixture : Flammable liquids, Category 2  
Eye irritation, Category 2A  
Specific target organ toxicity - single exposure, Category 3,  
Central nervous system

**GHS Label elements, including precautionary statements**

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Symbol(s)

:



Signal word

: Danger

Hazard statements

: Highly flammable liquid and vapour.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.

Precautionary statements

: **Prevention:**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
Keep container tightly closed.  
Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.  
Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
Wash skin thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Call a POISON CENTER/doctor if you feel unwell.  
If eye irritation persists: Get medical advice/ attention.  
In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

**Storage:**

Store in a well-ventilated place. Keep container tightly closed.  
Keep cool.  
Store locked up.

**Disposal:**

Dispose of contents/ container to an approved waste disposal

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plant.

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Acetone NF, 2-Propanone, Diethyl Ketone, Dimethylketal, Dimethylformaldehyde, Pyroacetic acid. Pyroacetic ether

Formula : C<sub>3</sub>H<sub>6</sub>O

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Acetone	67-64-1	100.00 %

**SECTION 4. FIRST AID MEASURES**

Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.

Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician if irritation develops or persists.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician.

Ingestion : Do not induce vomiting without medical advice. If a person vomits when lying on his back, place him in the recovery position. Never give anything by mouth to an unconscious person. Call a physician.

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**Notes to physician**

Indication of immediate medical attention and special treatment needed, if necessary : Treat symptomatically.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Dry chemical  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Cool closed containers exposed to fire with water spray.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : Extremely flammable.  
Vapours may form explosive mixtures with air.  
Vapours are heavier than air and may spread along floors.  
Vapors may travel to areas away from work site before igniting/flashing back to vapor source.  
In case of fire hazardous decomposition products may be produced such as:  
Carbon monoxide  
Carbon dioxide (CO<sub>2</sub>)
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Wear personal protective equipment. Unprotected persons must be kept away.  
Immediately evacuate personnel to safe areas.  
Keep people away from and upwind of spill/leak.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Do not swallow.  
Avoid breathing vapours, mist or gas.  
Avoid contact with skin, eyes and clothing.

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Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Prevent product from entering drains.  
Discharge into the environment must be avoided.  
Do not flush into surface water or sanitary sewer system.  
Do not allow run-off from fire fighting to enter drains or water courses.

Methods and materials for containment and cleaning up : Ventilate the area.  
No sparking tools should be used.  
Use explosion-proof equipment.  
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

**SECTION 7. HANDLING AND STORAGE****Handling**

Precautions for safe handling : Wear personal protective equipment.  
Use only in well-ventilated areas.  
Keep container tightly closed.  
Do not smoke.  
Do not swallow.  
Avoid breathing vapours, mist or gas.  
Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion : Keep away from fire, sparks and heated surfaces.  
Take precautionary measures against static discharges.  
Ensure all equipment is electrically grounded before beginning transfer operations.  
Use explosion-proof equipment.  
Keep product and empty container away from heat and sources of ignition.  
No sparking tools should be used.  
No smoking.

**Storage**

Conditions for safe storage, including any incompatibilities : Store in area designed for storage of flammable liquids. Protect from physical damage.  
Keep containers tightly closed in a dry, cool and well-ventilated

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place.  
 Containers which are opened must be carefully resealed and kept upright to prevent leakage.  
 Keep away from heat and sources of ignition.  
 Keep away from direct sunlight.  
 Store away from incompatible substances.  
 Container hazardous when empty.  
 Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
- Engineering measures : Use with local exhaust ventilation.  
Prevent vapour buildup by providing adequate ventilation during and after use.
- Eye protection : Do not wear contact lenses.  
Wear as appropriate:  
Safety glasses with side-shields  
If splashes are likely to occur, wear:  
Goggles or face shield, giving complete protection to eyes
- Hand protection : Solvent-resistant gloves  
Gloves must be inspected prior to use.  
Replace when worn.
- Skin and body protection : Wear as appropriate:  
Solvent-resistant apron  
Flame retardant antistatic protective clothing.  
If splashes are likely to occur, wear:  
Protective suit
- Respiratory protection : In the case of vapour formation use a respirator with an approved filter.  
For rescue and maintenance work in storage tanks use self-contained breathing apparatus.  
Use NIOSH approved respiratory protection.
- Hygiene measures : When using, do not eat, drink or smoke.  
Wash hands and face before breaks and immediately after

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handling the product.  
 Keep working clothes separately.  
 Remove and wash contaminated clothing before re-use.  
 Do not swallow.  
 Avoid breathing vapours, mist or gas.  
 Avoid contact with skin, eyes and clothing.

**Exposure Guidelines**

Components	CAS-No.	Value	Control parameters	Update	Basis
Acetone	67-64-1	TWA : Time weighted average	(250 ppm)	03 2015	ACGIH:US. ACGIH Threshold Limit Values
Acetone	67-64-1	STEL : Short term exposure limit	(500 ppm)	03 2015	ACGIH:US. ACGIH Threshold Limit Values
Acetone	67-64-1	REL : Recommended exposure limit (REL):	590 mg/m3 (250 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards
Acetone	67-64-1	PEL : Permissible exposure limit	2,400 mg/m3 (1,000 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Acetone	67-64-1	TWA : Time weighted average	1,800 mg/m3 (750 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)
Acetone	67-64-1	STEL : Short term exposure limit	2,400 mg/m3 (1,000 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Physical state	: liquid, clear
Color	: colourless
Odor	: sweet mint-like
Odor threshold	: Note: no data available
pH	: Note: Not applicable
Melting point/range	: -94.8 °C
Boiling point/boiling range	: 56 °C
Flash point	: -4 °F (-20 °C) Method: closed cup
Evaporation rate	: Note: no data available
Lower explosion limit	: 2.5 %(V)
Upper explosion limit	: 13 %(V)
Vapor pressure	: 240 hPa at 20 °C(68 °F)
Vapor density	: 2.0 Note: (Air = 1.0)
Density	: 0.79 g/cm <sup>3</sup> at 20 °C



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Water solubility	: Note: completely soluble
Partition coefficient: n-octanol/water	: Pow: 0.58 log Pow: -0.24
Ignition temperature	: 465 °C
Decomposition temperature	: Note: no data available
Viscosity, dynamic	: Note: no data available
Viscosity, kinematic	: Note: no data available
Molecular weight	: 58.08 g/mol

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: Hazardous polymerisation does not occur.
Conditions to avoid	: Heat, flames and sparks. Keep away from direct sunlight.
Incompatible materials	: Acids Aldehydes Alkalis Amines Ammonia Oxidizing agents Reducing agents Chlorine compounds
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Carbon monoxide

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Carbon dioxide (CO2)

**SECTION 11. TOXICOLOGICAL INFORMATION**

- Acute oral toxicity : LD50: 5,800 mg/kg  
Species: Rat
- Acute inhalation toxicity : LC50: 32000 ppm  
Exposure time: 4 h  
Species: Rat
- Acute dermal toxicity : LD50: > 7,426 mg/kg  
Species: Guinea pig
- Skin irritation : Species: Rabbit  
Result: Mild skin irritation  
Exposure time: 24 h
- Eye irritation : Species: Rabbit  
Result: Irritation to eyes, reversing within 7 days
- Repeated dose toxicity : Species: Rat  
NOEL: 19000 ppm  
Note: 8-Week Inhalation Toxicity Study 5 days/week for 8 weeks Slightly reduced weight gain compared to controls
- : Species: Rat  
NOEL: 100 mg/kg/d  
Note: 90-Day Oral Toxicity Study increased liver and kidney weights
- : Species: Rat  
Lowest observed effect level: 500 mg/kg/d  
Note: 90-Day Oral Toxicity Study increased liver and kidney weights

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- Genotoxicity in vitro
- : Result: negative  
Method: Mutagenicity (Salmonella typhimurium - reverse mutation assay)
  - : Result: negative  
Method: Chromosome aberration test in vitro
  - : Result: negative  
Method: Point mutation  
Note: Mouse lymphoma cells
  - : Result: negative  
Method: DNA cell-binding Assay

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity effects**

- Toxicity to fish
- : LC50: 5,540 mg/l  
Exposure time: 96 h  
Species: Oncorhynchus mykiss (rainbow trout)
  - : LC50: 8,300 mg/l  
Exposure time: 96 h  
Species: Lepomis macrochirus (Bluegill sunfish)
- Toxicity to daphnia and other aquatic invertebrates
- : LC50: 10 mg/l  
Exposure time: 24 h  
Species: Daphnia magna (Water flea)
- Toxicity to algae
- : EC50: 3,020 mg/l  
Exposure time: 14 d  
Species: Chlorella pyrenoidosa (aglae)
- Toxicity to bacteria
- : LC50: > 1,000 mg/l  
Species: Bacteria

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**Elimination information (persistence and degradability)**

Biodegradability : anaerobic  
Result: Readily biodegradable  
Value: 78 %  
Method: OECD 301 D

**Further information on ecology****SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

**SECTION 14. TRANSPORT INFORMATION**

**DOT** UN/ID No. : UN 1090  
Proper shipping name : ACETONE  
Class : 3  
Packing group : II  
Hazard Labels : 3

**IATA** UN/ID No. : UN 1090  
Description of the goods : ACETONE  
Class : 3  
Packaging group : II  
Hazard Labels : 3  
Packing instruction (cargo aircraft) : 364  
Packing instruction (passenger aircraft) : 353  
Packing instruction (passenger aircraft) : Y341

**IMDG** UN/ID No. : UN 1090  
Description of the goods : ACETONE  
Class : 3  
Packaging group : II  
Hazard Labels : 3  
EmS Number : F-E, S-D

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Marine pollutant : no

**SECTION 15. REGULATORY INFORMATION****Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. The Toxic Substances and Hazardous and Nuclear Waste Control Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

**National regulatory information**

US. Drug Enforcement Administration (DEA) Listed Precursor and Essential Chemicals (21 CFR 1310) : On the United States Drug Enforcement Authority (DEA) List of Precursors and Essential Chemicals

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	: Acetone	67-64-1
<b>SARA 302 Components</b>	: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.	
<b>SARA 313 Components</b>	: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.	
<b>SARA 311/312 Hazards</b>	: Fire Hazard Acute Health Hazard Chronic Health Hazard	
<b>CERCLA Reportable Quantity</b>	: 5000 lbs	
<b>California Prop. 65</b>	: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.	
<b>Massachusetts RTK</b>	: Acetone	67-64-1
<b>New Jersey RTK</b>	: Acetone	67-64-1
<b>Pennsylvania RTK</b>	: Acetone	67-64-1

**SECTION 16. OTHER INFORMATION**

	<b>HMIS III</b>	<b>NFPA</b>
Health hazard	: 2*	1
Flammability	: 3	3
Physical Hazard	: 0	
Instability	:	0

\* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

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**Further information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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