

Acetone**40289H-2.5L**

Version 1.3

Issuing date 12/07/2016

Revision Date 11/03/2017

Print Date 08/06/2019

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**Product information**

Trade name : Acetone

Number : 000000020241

Recommended use of the chemical and restrictions on use : Laboratory chemicals

Manufacturer or supplier's details : Honeywell Specialty Chemicals Seelze GmbH
Wunstorfer Straße 40
Seelze, 30926


For further information, please contact: : 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**
: **In Japan: +(81)-345209637**
: (24 hours/day, 7 days/week)

2. HAZARDS IDENTIFICATION**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

GHS Label elements, including precautionary statements

Symbol(s) : 

Signal word : Danger

Hazard statements : Highly flammable liquid and vapour.
Causes serious eye irritation.

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May cause drowsiness and 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 plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C₃H₆O

Chemical nature : Substance

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

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4. FIRST AID MEASURES

- | | |
|----------------|---|
| General advice | : First aider needs to protect himself.
Move out of dangerous area.
Take off all contaminated clothing immediately. |
| Inhalation | : Remove to fresh air.
Keep patient warm and at rest.
If symptoms persist, call a physician. |
| Skin contact | : After contact with skin, wash immediately with plenty of water.
Call a physician if irritation develops or persists. |
| Eye contact | : Rinse thoroughly with plenty of water, also under the eyelids.
Protect unharmed eye.
Consult a physician. |
| Ingestion | : When swallowed, allow water to be drunk.
Do NOT induce vomiting.
Call a physician immediately. |

5. FIREFIGHTING MEASURES

- | | |
|---|--|
| Suitable extinguishing media | : Water spray
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry powder |
| Unsuitable extinguishing media | : Do not use a solid water stream as it may scatter and spread fire. |
| Specific hazards during firefighting | : Highly 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. |
| Special protective equipment for firefighters | : Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear. |
| Further information | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |

6. ACCIDENTAL RELEASE MEASURES

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Personal precautions, protective equipment and emergency procedures : Evacuate personnel to safe areas.
Wear personal protective equipment. Unprotected persons must be kept away.
Ensure adequate ventilation.
Remove all sources of ignition.

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up : Ventilate the area.
Do not use sparking tools.
Use explosion-proof equipment.
Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE**Handling**

Precautions for safe handling : Wear personal protective equipment.
Use only in well-ventilated areas.

Advice on protection against fire and explosion : Keep product and empty container away from heat and sources of ignition.
No smoking.
Take precautionary measures against static discharges.
Vapours may form explosive mixtures with air.

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 place.
Store in original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
Acetone Acetone	67-64-1	TL : Threshold limits	(500 ppm)	08 2006	ISHL:Industrial Safety and Health Law OEL

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		TWA : Time weighted average	470 mg/m3 (200 ppm)	04 2007	Japan Society for Occupational Health: Japan Society for Occupational Health allowable concentration recommendation value
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Appropriate engineering controls

Use with local exhaust ventilation.

Prevent vapour buildup by providing adequate ventilation during and after use.

Individual protection measures, such as personal protective equipment

Respiratory protection	: In the case of vapour formation use a respirator with an approved filter.
Hand protection	: Impervious butyl rubber gloves Gloves must be inspected prior to use. Replace when worn.
Eye protection	: Safety glasses with side-shields
Skin and body protection	: Protective suit
Hygiene measures	: Take off all contaminated clothing immediately. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday. When using do not eat or drink.
Protective measures	: Ensure that eyewash stations and safety showers are close to the workstation location. Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment. Avoid breathing vapours, mist or gas.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	: liquid
Colour	: colourless

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Odour : characteristic

pH : Note: Not applicable

Melting point/range : -95 °C

Boiling point/boiling range : 55 - 57 °C at 1,013 hPa

Flash point : 1 °F (-17 °C)
Method: closed cup

Lower explosion limit : 2.2 %(V)

Upper explosion limit : 14.3 %(V)

Vapour pressure : ca. 240 hPa
at 20 °C(68 °F)

580 hPa
at 50 °C(122 °F)

Density : 0.79 g/cm³ at 20 °C

Water solubility : Note: completely miscible

Partition coefficient: n-octanol/water : log Pow: -0.24

Ignition temperature : 465 °C
Method: DIN 51794

Auto-ignition temperature : Note: not auto-flammable

Decomposition temperature : 236 °C
Note: Decomposition temperature, At normal pressure may be distilled without decomposition.

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Viscosity, dynamic : 0.32 mPa.s at 20 °C

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : 58.08 g/mol

10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.

Possibility of hazardous reactions : Hazardous polymerization does not occur.

Conditions to avoid : Heat

Incompatible materials to avoid : Plastic materials can be attacked.
Strong oxidizing agents
Bases
Strong acids
Alkali metals
Alkaline earth metals

Oxidizing solids
Oxidizing liquids

Hazardous decomposition products : In case of fire hazardous decomposition products may be produced such as:
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50: 5,800 mg/kg
Species: Rat

Acute inhalation toxicity : LC50: 76 mg/l , vapour
Exposure time: 4 h
Species: Rat, female

Acute dermal toxicity : LD50: > 7,400 mg/kg
Species: Rat

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Skin irritation	: Species: Rabbit Result: slight irritation Method: Draize Test
Eye irritation	: Species: Rabbit Result: Irritating to eyes.
Sensitisation	: Species: Guinea pig Classification: non-sensitizing
Repeated dose toxicity	: Species: Rat, male Application Route: Oral Exposure time: 90 d NOAEL (No observed adverse effect level): 900 mg/kg Method: OECD Test Guideline 408

12. ECOLOGICAL INFORMATION**Toxicity**

Toxicity to fish	: LC50: 6,210 mg/l Exposure time: 96 h Species: Pimephales promelas (fathead minnow)
	: LC50: 5,540 mg/l Exposure time: 96 h Species: Oncorhynchus mykiss (rainbow trout) Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	: LC50: 8,800 mg/l Exposure time: 48 h Species: Daphnia pulex (Water flea)
Toxicity to algae	: static test NOEC: 530 mg/l Exposure time: 8 d Species: Microcystis aeruginosa (blue-green algae)
Toxicity to bacteria	: EC50: 1,700 mg/l

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Exposure time: 16 h
Species: Bacteria

Persistence and degradability

Biodegradability : Result: Readily biodegradable
Value: 90 %

Bioaccumulative potential

Bioaccumulation : Bioconcentration factor (BCF): 3
Note: Bioaccumulation is unlikely.

Biochemical Oxygen Demand (BOD) : Value: 1,760 mg/g
Chemical Oxygen Demand (COD) : Value: 2,070 mg/g
Adsorbed organic bound halogens (AOX) : Note: Product does not contain any organic halogens.

13. DISPOSAL CONSIDERATIONS

WDPCCL Waste Disposal and Public Cleansing Law : Specially Controlled Industrial Waste
Disposal methods : In accordance with local and national regulations.

14. TRANSPORT INFORMATION**ADR**

UN/ID No. : UN 1090
Description of the goods : ACETONE
Class : 3
Packing group : II
Classification Code : F1
Hazard Identification Number : 33
Labels : 3

IATA

UN/ID No. : UN 1090

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Description of the goods : Acetone
Class : 3
Packing group : II
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
Packing group : II
Labels : 3
EmS Number 1 : F-E
EmS Number 2 : S-D

Marine pollutant : no

15. REGULATORY INFORMATION**National regulatory information**

Substances Subject to be :
Notified Names Threshold Concentration: 0.1 % wt 17
JP MSDSD

Substances Subject to be : Article 18
Indicated Names Threshold limits: 1 % wt 1.3
JPISHL LR

Vessel Safety Law : Flammable liquids (Article 2 and 3 of rules on shipping and storage of dangerous goods and its Attached Table 1)
JP VSL

Aviation Law : Flammable liquid (Article 194 of The Enforcement Rules of Aviation Law and its Attached Table 1)
JP AVL

Fire Service Law : Group 4 Flammable liquids
Type 1 petroleums
Hazardous rank II
Water soluble

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Keep away from fire

Poisonous and Deleterious
Substances Control Law : Not relevant

Other international regulations**Notification status**

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

16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 2*	1
Flammability	: 3	3
Physical Hazard	: 0	
Instability	:	0

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*** - 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.

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.

Previous Issue Date: 10/13/2017

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group