

# Material Safety Data Sheet

<b>Product name</b>	<b>Acetone</b>
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## 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product name	Acetone
1.2. CAS-No.	67-64-1
1.3. Relevant identified uses of the substance or mixture and uses advised against	
Identified uses	Solvent, BPA, MMA, MIBK, Acetic acid, Perfume, Chemical materials
1.4. Details of the supplier of the safety data sheet	
Company	Glory Global CO.,LTD
Address	C-208, 10, Nowon-ro 15-gil, Nowon-gu, Seoul, Korea
Emergency Phone	+82 2 6223 0862

## 2. Hazards identification

### 2.1. Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)	Reproductive toxicity : Category2 Serious eye damage/irritation : Category2 Flammable liquids : Category2 Specific target organ toxicity(Single exposure) : Category3(Narcotic effects) Specific target organ toxicity(Single exposure) : Category3(Respiratory tract irritation) Aspiration hazard : Category2
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### 2.2. GHS Label elements, including precautionary statements

Pictogram

Not a hazardous substance or mixture.



Signal word

Danger

Hazard statement(s)

H225 Highly flammable liquid and vapour  
 H305 May be harmful if swallowed and enters airways  
 H319 Causes serious eye irritation  
 H335 May cause respiratory irritation.  
 H336 May cause drowsiness and dizziness.  
 H361 Suspected of damaging fertility or the unborn child  
 P201 Obtain special instructions before use.  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat/sparks/open flames/hot surfaces. ? No smoking.  
 P233 Keep container tightly closed.

Precautionary code and statements:

P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
 P242 Use only non-sparking tools. Flammable liquids (chapter 2.6) 1, 2, 3  
 P243 Take precautionary measures against static discharge.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P264 Wash hands thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P281 Use personal protective equipment as required.  
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P308+P313 If exposed or concerned: Get medical advice/attention.  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
 P331 Do NOT induce vomiting.  
 P337+P313 If eye irritation persists: Get medical advice/attention.  
 P370+P378 In case of fire: Use Suitable extinguishing media for extinction(Refer Section MSDS 5).

Response

Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
 P403+P235 Store in a well-ventilated place. Keep cool.  
 P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulation

2.3. Other hazards which do not result in classification :  
(NFPA Classification)

NFPA grade (0 ~ 4 level)  
– Health : 1 , Flammability : 3, Reactivity : 0

### 3. Composition/information on ingredients

#### 3.1. Substances

Chemical Name	Trade names and Synonyms	CAS No.	Content(%)
Acetone	Methyl Ketone	67-64-1	100

### 4. First aid measures

#### 4.1. Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

When exposed to large amounts of steam and mist, move to fresh air.

Take specific treatment if needed.

Get medical attention immediately.

In case of skin contact

– If breathing is stopped or irregular, give artificial respiration and supply oxygen.  
Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Laundry enough contaminated clothing before reuse.

Get medical attention immediately.

In case of eye contact

Do not rub your eyes.

Immediately flush eyes with plenty of water for at least 15 minutes and call a doctor/physician.

Get medical attention immediately.

Go to the hospital immediately if symptoms (flare, irritate) occur.

Remove contact lenses if worn.

If swallowed

About whether I should induce vomiting Take the advice of a doctor.

Rinse your mouth with water immediately.

Get medical attention immediately.

If swallowed, large amounts of water to drink and do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

No data available

4.3. Indication of any immediate medical attention and special treatment needed

Notify medical personnel of contaminated situations and have them take appropriate protective measures.

If exposed or concerned, get medical attention/advice.

### 5. Firefighting measures

5.1. Suitable extinguishing media

Dry chemical, carbon dioxide, regular foam extinguishing agent, spray

Avoid use of water jet for extinguishing

5.2. Special hazards arising from the substance or mixture

Not available

5.3. Advice for firefighters

Cool containers with water until well after fire is out.

Keep unauthorized personnel out.

Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Notify your local fire station and inform the location of the fire and characteristics hazard.

Wear appropriate protective equipment.

Keep containers cool with water spray.

Vapor or gas is burned at distant ignition sources can be spread quickly.

5.4. Further information

No data available

### 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear proper personal protective apparatus as indicated in Section 8 and avoid skin contact and inhalation.

Do not touch spilled material. Stop leak if you can do it without risk.

Move container to safe area from the leak area.

Remove all sources of ignition.

Do not direct water at spill or source of leak.

Avoid skin contact and inhalation.

Keep unauthorized people away, isolate hazard area and deny entry.

6.2. Environmental precautions

Prevent runoff and contact with waterways, drains or sewers.

If large amounts have been spilled, inform the relevant authorities.

6.3. Methods and materials for containment and cleaning up

Large spill : Stay upwind and keep out of low areas. Dike for later disposal.

Notification to central government, local government. When emissions at least of the standard amount

Dispose of waste in accordance with local regulation.

Appropriate container for disposal of spilled material collected.

Small leak: sand or other non-combustible material, please let use absorption.

Wipe off the solvent.

Dike for later disposal.

Do not use plastic containers.

## 7. Handling and storage

## 7.1. Precautions for safe handling

Wash thoroughly after handling.  
 Avoid contact with incompatible materials.  
 Dealing only with a well-ventilated place.  
 Do not handle until all safety precautions have been read and understood.  
 Do not inhale the steam prolonged or repeated.  
 Avoid contact with heat, sparks, flame or other ignition sources.  
 Contaminated work clothing should not be allowed out of the workplace.

## 7.2. Conditions for safe storage, including any incompatibilities

Save in cool, dry and well ventilated place.  
 Check regularly for leaks.  
 Do not use damaged containers.  
 Do not apply direct heat.  
 Prevent static electricity and keep away from combustible materials or heat sources.  
 Collected them in sealed containers.

## 8. Exposure controls/personal protection

## 8.1. Control parameters

Components with workplace control parameters

[Acetone] : TWA 500 ppm

## 8.2. Exposure controls

Appropriate engineering controls

A system of local and/or general exhaust is recommended to keep employee exposures above the Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. The use of local exhaust ventilation is recommended to control emissions near the source.

Personal protective equipment

a) Eye/face protection

Wear primary eye protection such as splash resistant safety goggles with a secondary protection face shield.  
 Provide an emergency eye wash station and quick drench shower in the immediate work area.

b) Skin protection

Wear appropriate chemical resistant protective clothing.

c) Body Protection

Wear appropriate chemical resistant glove.

d) Respiratory protection

Under conditions of frequent use or heavy exposure, Respiratory protection may be needed.

Respiratory protection is ranked in order from minimum to maximum.

Consider warning properties before use.

Any chemical cartridge respirator with organic vapor cartridge(s).

Any chemical cartridge respirator with a full facepiece and organic vapor cartridge(s).

Any air-purifying respirator with a full facepiece and an organic vapor canister.

For Unknown Concentration or Immediately Dangerous to Life or Health : Any supplied-air respirator with full facepiece and operated in a pressure-demand or other positive-pressure mode in combination with a separate escape supply. Any self-contained

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Discharge into the environment must be avoided.

e) Control of environmental exposure

## 9. Physical and chemical properties

## 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Odour	Mild
Odour Threshold	24-1615 mg/m <sup>3</sup>
pH	No data available
Melting point/freezing point	-94.6 °C
Initial boiling point and boiling range	56 °C
Flash point	-20 °C
Evaporation rate	Not available
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	13 / 2.2 %
Vapour pressure	24 kPa (20 °C)
Vapour density	2
Solubility	in water : very good, in other solvents : almost good
Specific gravity	0.7899
Partition coefficient: n-octanol/water	-0.24
Auto-ignition temperature	465 °C
Decomposition temperature	No data available
Viscosity	0.303 cP (25 °C)
Molecular weight	58.08

## 9.2. Other safety information

No data available

## 10. Stability and reactivity

10.1. Reactivity	No data available
10.2. Chemical stability	This material is stable under recommended storage and handling conditions.
10.3. Possibility of hazardous reactions	Cylinders exposed to fire may vent and release flammable gas.
10.4. Conditions to avoid	Avoid contact with incompatible materials and condition. Avoid : Accumulation of electrostatic charges, Heating, Flames and hot surfaces Avoid contact with heat, sparks, flame or other ignition sources.
10.5. Incompatible materials	No data available
10.6. Hazardous decomposition products	May emit flammable vapour if involved in fire.

## 11. Toxicological information

11.1. Information on toxicological effects	
Acute toxicity	Oral – [Acetone] : LD50 = 5280 mg/kg Rat (EHC(1990), SIDS(1997)) Dermal – [Acetone] : LD50 = 12870 mg/kg rabbit (EHC(1990), PATTY(1994), SIDS(1997) Inhalation – [Acetone] : Steam LC50 = 32000 ppm Rat
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	Causes serious eye irritation
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	
a) IARC:	No data available
b) ACGIH	No data available
c) NTP	No data available
d) OSHA	No data available
Reproductive toxicity	Suspected of damaging fertility or the unborn child
Specific target organ toxicity – single exposure	May cause drowsiness and dizziness. May cause respiratory irritation.
Specific target organ toxicity – repeated exposure	No data available
Aspiration hazard	May be harmful if swallowed and enters airways
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	

## 12. Ecological information

12.1. Toxicity	Acute fish toxicity: LC50 > 100 mg/l 96 hr Acute Crustaceans toxicity: No data available Algae: No data available
12.2. Persistence and degradability	No data available
12.3. Bioaccumulative potential	No data available
12.4. Mobility in soil	No data available
12.5. Other adverse effects	No data available

## 13. Disposal considerations

13.1 Disposal methods	Since more than two kinds of designaed waste is mixed, it is difficult to treat seperatly, then can be reduction or stabilization by incineration or similar process. If water separation is possible, pre-process with Water separation process. Dispose by incineration.
13.2. Special precautions for disposal	The user of this product must disposal by oneself or entrust to waste disposer or person who other's waste recycle and dispose, person who establish and operate waste disposal facilities. Dispose of waste in accordance with all applicable laws and regulations.

## 14. Transport information

14.1. UN number	1090
14.2. Proper shipping name	Acetone
14.3. Hazard class	3
14.4. Packing group	II
14.5. Marine pollutant	Not applicable
14.6. Special precautions for user related to transport or transportation measures	Local transport follows in accordance with Dangerous goods Safety Management Law. Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements. EmS FIRE SCHEDULE : F-E (Non-water-reactive flammable liquids) EmS SPILLAGE SCHEDULE : S-D (Flammable liquids)

## 15. Regulatory information

15.1. POPs Management Law	Not applicable
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15.2. Information of EU Classification

- Classification  
[Acetone] : F; R11Xi; R36R66R67
- Risk Phrases  
[Acetone] : R11, R36, R66, R67
- Safety Phrase  
[Acetone] : S2, S9, S16, S26, S46

15.3. U.S. Federal regulations

OSHA PROCESS SAFETY (29CFR1910.119): Not applicable  
CERCLA Section 103 (40CFR302.4): 2267.995 kg 5000 lb  
EPCRA Section 302 (40CFR355.30): Not applicable  
EPCRA Section 304 (40CFR355.40): Not applicable  
EPCRA Section 313 (40CFR372.65): Not applicable

15.4. Rotterdam Convention listed ingredients

Not applicable

15.5. Stockholm Convention listed ingredients

Not applicable

15.6. Montreal Protocol listed ingredients

Not applicable

16. Other information

16.1. Further information

Always work safely around open hatches on bulk tanks. The low density makes flotation difficult for immersed person.

