

MATERIAL SAFETY DATA SHEET

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Material Name: ACETONE TECHNICAL GRADE
Formula: CH³COCH³
Recommended Use: Industrial Solvent. For manufacturing use only.
Supplier Name: JN INT'L Resources in Semicon Technology Co.
20 H. Rodis st., BFRV, Talon 2,
Las Pinas City, 1740 Philippines
Telephone Nos.: (632) 7997838
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SECTION 2 - HAZARDS IDENTIFICATION

GHS Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Signal Word Danger

GHS & CLP



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



Health: 2
Flammability: 3
Reactivity: 0



GHS07

Eye Irrit.2 H319 Causes serious eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Xi; Irritant

R36: Irritating to eyes.



F; Highly flammable

R11: Highly flammable.

R66: Repeated exposure may cause skin dryness or cracking.

R67: Vapours may cause drowsiness or dizziness.

- Information concerning particular hazards for human and environment:**
At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.



- **Label elements**

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labeled according to the CLP regulation.

- **Hazard statements**

H225 *Highly flammable liquid and vapour.*

H319+EUH066 *Causes serious eye irritation. Repeated exposure may cause skin dryness or cracking.*

H336 *May cause drowsiness or dizziness.*

- **Precautionary statements**

P210 *Keep away from heat/sparks/open flames/hot surfaces.- No smoking.*

P233 *Keep container tightly closed.*

P305+P35+P338 *IF IN EYES: Rinse cautiously with water for several minutes. Remove Contact lenses, if present and easy to do. Continue rinsing.*

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** *Not applicable.*

- **vPvB:** *Not applicable.*

SECTION 3 - COMPOSITION /INFORMATION ON INGREDIENTS
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Chemical Identity: Propan-2-one

CAS NO.: 67-64-1

Concentration: 100%

Common Name(s): Acetone

Identification number(s)

EC number: 200-662-2

Index number 606-001-00-8

SECTION 4 - FIRST AID MEASURES

General information: Immediately remove any clothing soiled by the product.

Inhalation: Supply fresh air; consult doctor in case of complaints.

Skin contact: Immediately rinse with water. If skin irritation continues, consult doctor.

Eye contact: Rinse opened eye for several minutes under running water.
Then consult doctor.

After Swallowing: Do not induce vomiting; call form medical help immediately.
Risk of aspiration! Keep airways free.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

SECTION 5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media:

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special Hazard arising from the substance or mixture

Combustible. Vapours are heavier than air and may spread along floors.

Form explosive mixtures with air at ambient temperatures. Beware of backfiring.

Precautions for Fire Fighters:

Wear self-contained respiratory protective device.

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Wear fully protective suit.

Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter the sewage system. Contain escaping vapours with water.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Do not inhale steams/ aerosols.

Keep away from ignition sources.

Avoid substance contact

Ensure adequate ventilation

Environmental precautions

Absorb with liquid-binding material (AppliSorb).

Clean up affected area.

Dispose of the material collected according to regulations.

Reference to the sections

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

SECTION 7 - HANDLING & STORAGE

Precautions for Safe Handling:

Open and handle receptacle with care.

Work only in fume cupboard

Do not inhale substance

Avoid generation of vapours/aerosols

Information about fire – and explosion protection:

Keep ignition sources away – Do not smoke

Protect against electrostatic charges.

Conditions for Safe storage, including any incompatibilities storage:

Requirements to be met by storerooms and receptacles: Store in a cool location

Information about storage in once common storage facility: Away from sources of ignition

Further information about storage conditions:

Store only outside or in explosion proof rooms

Recommended storage temperature: 15-25°C

Storage Class: 3A

Specific end use(s) No further relevant information available.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7
Occupational Exposure Limits

Material	Source	Type	ppm	mg/m3	Notation
Acetone	ACGIH	TWA	500ppm		
	ACGIH	STEL	750		
	PH OEL	TWA PH	1,000 ppm	2,400 mg/m3	

Additional information: The lists valid during the making were used as basis.

Exposure controls

Personal protective equipment:

(PPL) should meet recommended national standards. Check with PPE suppliers.

General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work

Avoid contact with the eyes and skin

Respiratory protection:

Respiratory protection required when vapours/aerosols are generated.

Filter AX

Protection of hands:

Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistant of glove material, glove thickness, and dexterity.

Contaminated gloves should be replaced.

Recommended thickness of the material: >0.7mm Nitrile rubber, PVC Viton.

Value for the permeation: Level >480 min

Eye protection



Chemical splash goggles (chemical monogoggles)

Protective clothing:

Use protective clothing, which is chemical resistance to this material. Safety shoes and boots should also be chemical resistant.

SECTION 9 - PHYSICAL & CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Clear Liquid
Odour:	characteristic
pH	not applicable
Boiling point/range:	53°C / 133°F
Flash point:	48°C / 0°F (IP 170)
Explosion flammability:	ca. 2.1 – 13%V
Limits in air	
Auto-Ignition temperature:	540°C / 1,004°F (ASTM D-2155)
Vapour pressure:	24.7 kPa kg/m ³ at 20°V /68°F
Density:	790 – 732 kg/m ³ at 20°C /68°F (ASTM D-4052)
Water Solubility / water partition	at 20°C / 68°F completely miscible 0.2
Coefficient (log Pow)	
Dynamic Viscosity:	0.33mPa.s at 20°C /68°F
Vapour density (air=1):	2 at 20°C /68°F
Coefficient of expansion:	0.0014 / °C
Dielectric constant:	21.4 at 20°C /68°F
Heat of vapourisation:	525 kJ/kg °C
Refractive index:	1,359 at 20°C /68°F (ASTM D-1218)
Specific heat:	2.14 kJ/kg at 20°C /68°F
Saturated vapour: Concentration in air	590 g/m ³ at 20°C / 68°F (estimated value(s))
Thermal conductivity:	0.16 W/m °C at 20°C /68°F
Evaporation rate (nBuAc=1)	5.6 (ASTM D-3539, nBuAc = 1 2 (DIN 53170, di-ethyl ether = 1
Surface tension	22.8 mN/m at 20 °C /68°F
Molecular weight:	58.8 g/mol

SECTION 10 - STABILITY AND REACTIVITY
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Chemical stability:	Stable under normal conditions of use.
Conditions to avoid:	Avoid Heat, sparks, open flames, ignition sources and incompatibles.
Materials to avoid:	Strong oxidizing agents

Hazardous Decomposition Products:

None expected under normal use conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Basis for assessment: Information given is based on product testing.

Acute Oral Toxicity:

Low toxicity: LD50 >2000 m/kg, Rat

Aspiration into the lungs when swallowed or vomited may cause Chemical pneumonitis, which can be fatal

Acute Dermal Toxicity: Low toxicity: LD50 >2000mg/kg, Rabbit

Acute Inhalation Toxicity:

Low toxicity: LD50 >20mg/l / 4 hours, Rat

High concentrations may cause central nervous system

Depression resulting in headaches, dizziness and nausea, continued inhalation may result in unconsciousness and/ or death.

Skin Irritation:

No irritating to eyes.

Prolonged/ repeated contact may cause defatting of the skin which can lead to dermatitis.

Eye Irritation: Irritating to eyes.

Respiratory Irritation: Inhalation of vapor s or mists may cause irritation to the respiratory system.

Repeated dose Toxicity: Low systemic toxicity on repeated exposure.

Mutagenicity: Not mutagenic.

Carcinogenicity: Not expected to be carcinogenic.

Reproductive and Development Toxicity:

Causes slight foetotoxicity. Effects were soon at high doses only.

Additional information:

Exposure may enhance the toxicity of other materials. May potentiate the peripheral neurotoxicity of a hexane, and the liver and kidney toxicity of some chlorinated hydrocarbons such as carbon tetrachloride.

SECTION 12 – ECOLOGICAL INFORMATION

Acute Toxicity

Fish	Low toxicity: LC/EC/IC50 > 1000 mg/l
Aquatic Invertebrates	Low toxicity: LC/EC/IC50 > 1000 mg/l
Algae	Low toxicity: LC/EC/IC50 > 1000 mg/l
Microorganisms	Low toxicity: LC/EC/IC50 > 1000 mg/l

Mobility If product enters soil, it will be mobile and may contaminate ground water.

Persistence/degradability Readily biodegradable.

Bioaccumulation Not expected to bio-accumulate significantly.

SECTION 13 - DISPOSAL CONSIDERATIONS

Material Disposal:

Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the materials generated to determine the proper waste.

Container Disposal:

Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums. Send to drum recoverer or metal reclaimer.

SECTION 14 - TRANSPORT INFORMATION

IMDG

Identification number:	UN1090
Proper Shipping Name:	ACETONE
Class and Subsidiary risk:	3
Packaging group:	II
Marine Pollutant:	No



IATA (Country variations may apply)

UN No.	1090
Proper Shipping Name:	ACETONE
Class and Subsidiary risk:	3
Packaging group:	II
Marine Pollutant:	No



SECTION 15 - REGULATORY INFORMATION

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Chemical safety assessment: A chemical safety assessment has not been carried out.

SECTION 16 - OTHER INFORMATION

MSDS Version Number: 2.2
MSDS Effective Date: 25 November 2005

Uses and Restrictions: Industrial Solvent
Restricted to professional users.

Disclaimer:

The information published in this Material Safety Data Sheet has been compiled from data in various technical publications. It is the user's responsibility to determine the suitability of this information for adoption of necessary safety precautions. We reserve the right to revise material Safety Data Sheets as new information becomes available. Copies may be made for non-profit use.