

Safety Data Sheet
according to 1907/2006/EC, Article 31

Printing date 25.08.2007

Revision: 25.08.2007

1 Identification of substance:

· **Product details:**

· **Trade name:** Acetone

· **Article number:**

8001, 8002, 8003, 8196, 5350, 5356, 3403, 9036-03, 9008-01, 9254, 8142, KP4066, 9010-01, 201000, 5556 AD, 5018, 5008, 2608, 9005-35

· **Application of the substance / the preparation**

Chemicals for synthesis
Laboratory chemicals

· **Manufacturer/Supplier:**

Mallinckrodt Baker B.V
P.O.Box 1
7400 AA Deventer
The Netherlands

Tel(+31)(0) 570-687500
Fax(+31)(0) 570-687574
E-mail : jtbaker.nl@covidien.com

· **Informing department:**

Quality Systems & Regulatory Affairs
E-mail : sjors.duteweert@covidien.com

· **Emergency information:**

Environment Health & Safety department
during normal opening times (8 am till 5.30 pm) tel: (+31)(0) 570 687500

2 Hazards identification

· **Hazard designation:**



Xi Irritant
F Highly flammable

· **Information pertaining to particular dangers for man and environment**

At long or repeated contact with skin it may cause dermatitis due to the degreasing effect of the solvent.

Has a narcotizing effect.

R 11 Highly flammable.

R 36 Irritating to eyes.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

3 Composition/information on ingredients

· **Chemical characterization:**

· **CAS No. Designation:**

67-64-1 Acetone

· **Identification number(s):**

· **EINECS Number:** 200-662-2

· **EC Number:** 606-001-00-8

4 First aid measures

· **After inhalation** Supply fresh air; consult doctor in case of symptoms.

· **After skin contact** The product is not skin irritating.

· **After eye contact** Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

· **After swallowing**

Rinse out mouth

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Inform doctor. Do not give milk or fatty oils.

5 Fire fighting measures

- **Suitable extinguishing agents**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Protective equipment:** Put on breathing apparatus.
- **Additional information** Cool endangered containers with water spray jet.

6 Accidental release measures

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:**
Prevent material from reaching sewage system, holes and cellars.
Dilute with plenty of water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling**
- **Information for safe handling:**
No special precautions necessary if used correctly.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage**
- **Requirements to be met by storerooms and containers:** Store in cool location.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
+ 15°C - +25°C
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with critical values that require monitoring at the workplace:**

67-64-1 Acetone

WEL ()	Short-term value: 3620 mg/m ³ , 1500 ppm Long-term value: 1210 mg/m ³ , 500 ppm
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.

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Wash hands during breaks and at the end of the work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Breathing equipment:**

In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use breathing apparatus that is independent of circulating air.

Use breathing protection in case of insufficient ventilation.

· **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Butyl rubber, BR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

In full contact:

Layer thickness : 0.7 mm

Breakthrough time: >480 min.

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** *Tightly sealed safety glasses.*

· **Body protection:** *Protective work clothing.*

9 Physical and chemical properties:

· **General Information**

Form: Liquid
Colour: Colourless
Smell: Fruit-like

· **Change in condition**

Melting point/Melting range: -94.9°C
Boiling point/Boiling range: 55.8-56.6°C

· **Flash point:** -20°C

· **Ignition temperature:** 465°C

· **Danger of explosion:** *Product is not explosive. However, formation of explosive air/steam mixtures is possible.*

· **Critical values for explosion:**

Lower: 2.6 Vol %
Upper: 13.0 Vol %

· **Steam pressure at 20°C:** 233 hPa

· **Density at 20°C** 0.79 g/cm³

· **Solubility in / Miscibility with**

Water: Fully miscible

· **pH-value (395 g/l) at 20°C:** 5-6

· **Segregation coefficient (n-octanol/water):** -0.2 log POW

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· **Viscosity:**
dynamic at 25°C: 32 mPas

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** Heat, boiling temperatures.
- **Materials to be avoided:**
- **Dangerous reactions**
Reacts with halogenated compounds
Reacts with oxidizing agents
Violent reactions with strong alkalis and oxidizing agents
- **Dangerous products of composition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)
Inhalative	LC50/4h	76 mg/l (rat)

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.

12 Ecological information:

- **Ecotoxic effects:**
- **Aquatic toxicity:**

EC5 / 16h	1700 mg/l (Pseudomonas putida.)
EC5 / 72h	28 mg/l (Entosiphon sulcatum)
EC5/ 8 d	530 mg/l (M.aeruginosa)
EC50/48h	12600-12700 mg/l (daphnia magna)
IC5 / 8 d	7500 mg/l ((alg) Scenedesmus quadricauda)
LC50/96h	8300 mg/l (Bluegill Sunfish (Lepomis Macrochirus))
	5540 mg/l (Trout, rainbow (Salmo gairdnerii))
	6210 mg/l (Fathead minnow (Pimephales promelas))

- **Additional ecological information:**
- **COD-value:** 2.07 g/g
- **General notes:**
Water hazard class (D) 1 (Assessment by list): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

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13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

* **14 Transport information**

· **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



- **ADR/RID-GGVS/E Class:** 3 Flammable liquids.
- **Kemler Number:** 33
- **UN-Number:** 1090
- **Packaging group:** II
- **Label** 3
- **Designation of goods:** 1090 ACETONE
- **Limited quantities (LQ)** LQ4
- **Transport category** 2
- **Tunnel restriction code** D1E

· **Maritime transport IMDG/GGVSea:**



- **IMDG/GGVSea Class:** 3
- **UN Number:** 1090
- **Label** 3
- **Packaging group:** II
- **EMS Number:** F-E,S-D
- **Correct technical name:** ACETONE

· **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 1090
- **Label** 3
- **Packaging group:** II
- **Correct technical name:** ACETONE

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15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)

· **Code letter and hazard designation of product:**

*Xi Irritant
F Highly flammable*

· **Risk phrases:**

*11 Highly flammable.
36 Irritating to eyes.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.*

· **Safety phrases:**

*9 Keep container in a well-ventilated place.
16 Keep away from sources of ignition - No smoking.
23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.*

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing data specification sheet:** *Quality Assurance Department*
- **Contact:** *Sjors duteweert*
- *** Data compared to the previous version altered.**