

MATERIAL SAFETY DATA SHEET  
3-Pentanone

### Section 1 - Chemical Product and Company Identification

<b>MSDS Name:</b>	3-Pentanone
<b>Catalog Numbers:</b>	15581-0000, 15581-0050, 15581-5000
<b>Synonyms:</b>	Diethyl ketone
<b>Company Identification:</b>	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
<b>Company Identification: (USA)</b>	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
<b>For information in the US, call:</b>	800-ACROS-01
<b>For information in Europe, call:</b>	+32 14 57 52 11
<b>Emergency Number, Europe:</b>	+32 14 57 52 99
<b>Emergency Number US:</b>	201-796-7100
<b>CHEMTREC Phone Number, US:</b>	800-424-9300
<b>CHEMTREC Phone Number, Europe:</b>	703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
96-22-0	3-Pentanone	98%	202-490-3

**Hazard Symbols:** XI F



**Risk Phrases:** 11 37 66 67

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

*Highly flammable. Irritating to respiratory system. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.*

#### Potential Health Effects

- Eye:** May cause eye irritation. Causes redness and pain. May cause irritation of the conjunctiva.
- Skin:** May cause skin irritation. May cause dermatitis. Causes redness and pain. Repeated or prolonged exposure may cause drying and cracking of the skin. Contact with the skin defats the skin.
- Ingestion:** May cause irritation of the digestive tract. May cause nausea and vomiting. May cause central nervous system effects.
- Inhalation:** Causes respiratory tract irritation. May be harmful if inhaled. May cause headache.

Overexposure may produce irritation of the nose and throat. Inhalation of vapors may cause drowsiness and dizziness.

**Chronic:** Prolonged or repeated skin contact may cause dermatitis.

#### Section 4 - First Aid Measures

- Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
- Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Ingestion:** Get medical aid. Wash mouth out with water.
- Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
- Notes to Physician:** Treat symptomatically and supportively.

#### Section 5 - Fire Fighting Measures

- General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapor. Forms explosive mixtures with air.
- Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

#### Section 6 - Accidental Release Measures

- General Information:** Use proper personal protective equipment as indicated in Section 8.
- Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool.

#### Section 7 - Handling and Storage

- Handling:** Use spark-proof tools and explosion proof equipment. Contents may develop pressure upon prolonged storage. Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes. Take precautionary measures against static discharges.
- Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

#### Section 8 - Exposure Controls, Personal Protection

##### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

##### Exposure Limits

CAS# 96-22-0:

United Kingdom, WEL - TWA: 200 ppm TWA; 716 mg/m<sup>3</sup> TWA United Kingdom, WEL - STEL: 250 ppm STEL; 895 mg/m<sup>3</sup> STEL

Belgium - TWA: 200 ppm VLE; 715 mg/m<sup>3</sup> VLE

France - VME: 200 ppm VME; 705 mg/m<sup>3</sup> VME

Germany: 700 mg/m<sup>3</sup> TWA

Malaysia: 200 ppm TWA; 705 mg/m<sup>3</sup> TWA

Netherlands: 200 ppm MAC; 705 mg/m<sup>3</sup> MAC

Spain: 200 ppm VLA-ED; 716 mg/m<sup>3</sup> VLA-ED Spain: 300 ppm VLA-EC; 1075 mg/m<sup>3</sup> VLA-EC

## Personal Protective Equipment

**Eyes:** Wear chemical splash goggles.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Clear liquid

**Color:** colorless

**Odor:** acetone-like

**pH:** 6.2 (50 g/l aq.solution)

**Vapor Pressure:** 37.6mbar @20 deg C

**Viscosity:** 0.47 mPa.s @20 deg C

**Boiling Point:** 100 - 102 deg C @760mmHg

**Freezing/Melting Point:** -40 deg C ( -40.00°F)

**Autoignition Temperature:** 425 deg C ( 797.00 deg F)

**Flash Point:** 7 deg C ( 44.60 deg F)

**Explosion Limits: Lower:** 1.6 Vol %

**Explosion Limits: Upper:** 7.7 Vol %

**Decomposition Temperature:** Not available

**Solubility in water:** 50 g/l (20°C)

**Specific Gravity/Density:** 0.815

**Molecular Formula:** C5H10O

**Molecular Weight:** 86.13

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat.

**Incompatibilities with Other Materials** Excess heat, reducing agents, acids, strong bases, alkalis, nitric acid + hydrogen peroxide.

**Hazardous Decomposition Products** Carbon monoxide, carbon dioxide, acrid smoke and fumes.

**Hazardous Polymerization** Will not occur.

## Section 11 - Toxicological Information

**RTECS#:** CAS# 96-22-0: SA8050000

**LD50/LC50:** RTECS:  
**CAS# 96-22-0:** Draize test, rabbit, eye: 50 mg Moderate;  
Draize test, rabbit, eye: 100 mg/24H Moderate;  
Draize test, rabbit, skin: 500 mg/24H Mild;  
Oral, mouse: LD50 = 3100 mg/kg;  
Oral, mouse: LD50 = 3200 mg/kg;  
Oral, rat: LD50 = 2140 mg/kg;  
Skin, rabbit: LD50 = 20 mL/kg;  
Skin, rat: LD50 = 2100 mg/kg;

**Carcinogenicity:** 3-Pentanone - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Other:** See actual entry in RTECS for complete information.

### Section 12 - Ecological Information

**Ecotoxicity:** Fish: Fathead Minnow: LC50: 1530 mg/L; 96h; .  
Algae: Fathead Minnow: IC/LC50: > 500mg/L; 72h; .  
Daphnia: Daphnia: EC50: > 500mg/l; 48h; .

**Other:** Avoid entering into waters or underground water. Do not empty into drains.  
Log Pow: 0.85

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	DIETHYL KETONE	DIETHYL KETONE	DIETHYL KETONE
<b>Hazard Class:</b>	3	3	3
<b>UN Number:</b>	1156	1156	1156
<b>Packing Group:</b>	II	II	II

### Section 15 - Regulatory Information

#### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI F

Risk Phrases:

- R 11 Highly flammable.
- R 37 Irritating to respiratory system.
- R 66 Repeated exposure may cause skin dryness or cracking.
- R 67 Vapours may cause drowsiness and dizziness.

Safety Phrases:

- S 9 Keep container in a well-ventilated place.
- S 16 Keep away from sources of ignition - No smoking.
- S 25 Avoid contact with eyes.
- S 33 Take precautionary measures against static discharges.

WGK (Water Danger/Protection)

CAS# 96-22-0: 1

Canada

CAS# 96-22-0 is listed on Canada's DSL List

#### US Federal

TSCA

CAS# 96-22-0 is listed on the TSCA Inventory.

### Section 16 - Other Information

**MSDS Creation Date:** 7/16/1996

**Revision #2 Date** 6/01/2005

**Revisions were made in Sections:** General revision.

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