

# Material Safety Data Sheet

## 2-Octanone, 99+%

ACC# 97367

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** 2-Octanone, 99+%**Catalog Numbers:** AC129420000, AC129420050, AC129420250, AC129425000**Synonyms:** Hexyl methyl ketone; n-Hexyl methyl ketone; Methyl hexyl ketone.**Company Identification:**

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

**For information in North America, call:** 800-ACROS-01**For emergencies in the US, call CHEMTREC:** 800-424-9300

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
111-13-7	2-Octanone	98	203-837-1

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 55 deg C.

**Warning! Flammable liquid and vapor.** May cause eye, skin, and respiratory tract irritation. May be harmful if absorbed through the skin. May cause adverse reproductive effects based upon animal studies.**Target Organs:** None known.**Potential Health Effects****Eye:** May cause eye irritation.**Skin:** May cause skin irritation. May be harmful if absorbed through the skin.**Ingestion:** May cause digestive tract disturbances.**Inhalation:** May cause respiratory tract irritation.**Chronic:** Adverse reproductive effects have been reported in animals.

### Section 4 - First Aid Measures

**Eyes:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid if irritation or symptoms occur.**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. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

**Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or chemical foam.

**Flash Point:** 55 deg C ( 131.00 deg F)

**Autoignition Temperature:** Not available.

**Explosion Limits, Lower:**Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 1; Flammability: 2; Instability: 0

## 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. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Ground and bond containers when transferring material. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## 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 ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Octanone	none listed	none listed	none listed

**OSHA Vacated PELs:** 2-Octanone: No OSHA Vacated PELs are listed for this chemical.

### 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:** Liquid  
**Appearance:** Clear - colorless  
**Odor:** fresh green odor - floral-like  
**pH:** Not available.  
**Vapor Pressure:** .75 mm Hg @ 20 deg C  
**Vapor Density:** 4.42 (air=1)  
**Evaporation Rate:**Not available.  
**Viscosity:** Not available.  
**Boiling Point:** 173 deg C @ 760 mmHg  
**Freezing/Melting Point:**-16 deg C  
**Decomposition Temperature:**Not available.  
**Solubility:** Negligible.  
**Specific Gravity/Density:**.8190 g/ml  
**Molecular Formula:**C8H16O  
**Molecular Weight:**128.21

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures.  
**Conditions to Avoid:** Ignition sources, excess heat.  
**Incompatibilities with Other Materials:** Strong oxidizing agents.  
**Hazardous Decomposition Products:** Carbon monoxide, carbon monoxide, carbon dioxide.  
**Hazardous Polymerization:** Has not been reported.

## Section 11 - Toxicological Information

**RTECS#:**  
**CAS#** 111-13-7: RH1484000  
**LD50/LC50:**  
CAS# 111-13-7:  
Draize test, rabbit, skin: 500 mg/24H Mild;  
Inhalation, mouse: LC50 = 102000 mg/m3;  
Inhalation, rat: LC50 = >2132 ppm/6H;  
Oral, mouse: LD50 = 3100 mg/kg;  
Oral, rat: LD50 = 3089 mg/kg;  
Skin, rabbit: LD50 = 1337 mg/kg;  
.  
Inhalation, rat: LC50 = >5222 ppm/1 hour  
**Carcinogenicity:**  
CAS# 111-13-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** No data available.  
**Teratogenicity:** No information found  
**Reproductive Effects:** Adverse reproductive effects have occurred in experimental animals.  
**Mutagenicity:** No information found  
**Neurotoxicity:** No information found  
**Other Studies:**

## Section 12 - Ecological Information

**Ecotoxicity:** Fish: Fathead Minnow: LC50 = 36 mg/L; 96 hour; Hard Water Bacteria: Gold orfe: EC50 = 11.7 ppm; 5 minutes; Microtox Test No data available.

**Environmental:** Terrestrial: Will have moderate mobility in soil. Aerobic biodegradation of this compound is expected. Aquatic: May adsorb to suspended solids and sediment in the water column. Aerobic biodegradation of this compound is expected. Atmospheric: Will mainly exist in the vapor phase in the ambient atmosphere. Degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals; half-life 1.6 days. Bioconcentration may occur.

**Physical:** No information available.

**Other:** No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	KETONES, LIQUID, N.O.S.	KETONES, LIQUID, N.O.S.
<b>Hazard Class:</b>	3	3
<b>UN Number:</b>	UN1224	UN1224
<b>Packing Group:</b>	III	III

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 111-13-7 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 111-13-7: immediate, fire.

**Section 313** No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

**Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.  
None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

**STATE**

CAS# 111-13-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

**California Prop 65**

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

XN

**Risk Phrases:**

R 10 Flammable.  
R 21 Harmful in contact with skin.

**Safety Phrases:**

S 16 Keep away from sources of ignition - No smoking.  
S 36/37 Wear suitable protective clothing and gloves.

**WGK (Water Danger/Protection)**

CAS# 111-13-7: 1

**Canada - DSL/NDSL**

CAS# 111-13-7 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of B3, D2A, D2B.  
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

Section 16 - Additional Information

**MSDS Creation Date:** 5/26/1999

**Revision #5 Date:** 11/20/2008

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