

Material Safety Data Sheet

Octane, 99+%

ACC# 95623

Section 1 - Chemical Product and Company Identification

MSDS Name: Octane, 99+%**Catalog Numbers:** AC129370000, AC129370020, AC129370250, AC129375000**Synonyms:** n-Octane.**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
111-65-9	Octane	99+%	203-892-1

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: 56 deg F.

Warning! Flammable liquid and vapor. Causes eye and skin irritation. Causes digestive and respiratory tract irritation. May cause central nervous system depression. May cause cardiac disturbances.

Target Organs: Central nervous system.

Potential Health Effects

Eye: Causes eye irritation.

Skin: Causes skin irritation. May be absorbed through the skin in harmful amounts. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis.

Ingestion: Aspiration hazard. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

Inhalation: Causes respiratory tract irritation. Irritation may lead to chemical pneumonitis and pulmonary edema. May cause narcotic effects in high concentration. Exposure produces central nervous system depression.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. 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. Possible aspiration hazard. Get medical aid immediately.

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. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May accumulate static electrical charges, and may cause ignition of its own vapors.

Extinguishing Media: Use foam, dry chemical, or carbon dioxide. Water may be ineffective. Water may spread fire.

Flash Point: 56e deg F (13.33 deg C)

Autoignition Temperature: 403 deg F (206.11 deg C)

Explosion Limits, Lower:1.0

Upper: 6.5

NFPA Rating: (estimated) Health: 0; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Remove all sources of ignition. Absorb spill using an absorbent, non-combustible material such as earth, sand, or vermiculite. Do not use combustible materials such as sawdust. 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. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not ingest or inhale. 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: Use explosion-proof ventilation equipment. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Octane	none listed	75 ppm TWA; 350 mg/m ³ TWA 1000 ppm IDLH	500 ppm TWA; 2350 mg/m ³ TWA

OSHA Vacated PELs: Octane: 300 ppm TWA; 1450 mg/m³ TWA

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear impervious gloves.

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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless

Odor: mild odor - gasoline-like

pH: Not available.

Vapor Pressure: 11 mm Hg @ 20C

Vapor Density: 3.9 (air=1)

Evaporation Rate:0.6 (butyl acetate=1)

Viscosity: Not available.

Boiling Point: 258 deg F

Freezing/Melting Point:-73.5 deg F

Decomposition Temperature:Not available.

Solubility: Insoluble in water.

Specific Gravity/Density:0.7 (water=1)

Molecular Formula:C₈H₁₈

Molecular Weight:114.126

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Forms explosive mixtures with air.

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

Incompatibilities with Other Materials: Oxidizing agents, coatings, plastics, rubber.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:**CAS#** 111-65-9: RG8400000**LD50/LC50:**

CAS# 111-65-9:

Inhalation, rat: LC50 = 118 gm/m³/4H;**Carcinogenicity:**

CAS# 111-65-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.**Teratogenicity:** No information available.**Reproductive Effects:** No information available.**Neurotoxicity:** No information available.**Mutagenicity:** No information available.**Other Studies:** None.

Section 12 - Ecological Information
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Ecotoxicity: Water flea EC50 = 0.38 mg/L; 48 Hr.; Unspecified Conditions Bacteria: *Phytobacterium phosphoreum*: EC50 = 890 mg/L; 30 minutes; Microtox test No information available.

Environmental: TERRESTRIAL FATE: Photolysis or hydrolysis of n-octane is not expected to be important in soils. The biodegradation of n-octane may occur in soils; however, volatilization and adsorption are expected to be far more important fate processes. An estimated range for Koc from 5500 to 15,600 indicates n-octane will be immobile in most soils. Based upon an estimated Henry's Law Constant of 3.21 atm-cu m/mole, n-octane is also expected to rapidly volatilize from moist surface soils.

Physical: No information available.

Other: AQUATIC FATE: Photolysis or hydrolysis of n-octane in aquatic systems is not expected to be important. The biodegradation of n-octane may occur in aquatic environments, however volatilization and adsorption are expected to be far more important fate processes. The log bioconcentration factor (log BCF) for n-octane has been estimated to range from 2.89 to 3.71 suggesting bioconcentration may be an important factor in aquatic systems. An estimated range for Koc from 5500 to 15,600 indicates n-octane will strongly adsorb to carbon.

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
Shipping Name:	OCTANES	OCTANES
Hazard Class:	3	3
UN Number:	UN1262	UN1262

Packing Group:	II	II
Additional Info:		FLASHPOINT 13C

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 111-65-9 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 # 111-65-9: acute, flammable.

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# 111-65-9 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

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:

F

Risk Phrases:

R 11 Highly flammable.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 29 Do not empty into drains.

S 33 Take precautionary measures against static discharges.

S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 111-65-9: 1

Canada - DSL/NDSL

CAS# 111-65-9 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, D2B.

Canadian Ingredient Disclosure List

CAS# 111-65-9 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 6/08/1999

Revision #3 Date: 3/18/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.