

Material Safety Data Sheet

Pinacolone

ACC# 97235

Section 1 - Chemical Product and Company Identification

MSDS Name: Pinacolone

Catalog Numbers: AC131250050, AC131251000, AC131255000, AC408241000

Synonyms: tert-Butyl methyl ketone; 3,3-Dimethyl-2-butanone; Methyl tert-butyl ketone; 1,1,1-Trimethylacetone; an aliphatic 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
75-97-8	Pinacolone	96	200-920-4

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: 5 deg C.

Warning! Flammable liquid and vapor. May cause eye, skin, and respiratory tract irritation. May be harmful if swallowed.

Target Organs: No data found.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. May be harmful if swallowed.

Inhalation: May cause respiratory tract irritation. Vapors may cause dizziness or suffocation.

Chronic: No information found.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid.

Skin: In case of contact, flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical aid if irritation develops and persists. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: If inhaled, remove to fresh air. 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. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Flash Point: 5 deg C (41.00 deg F)

Autoignition Temperature: Not available.

Explosion Limits, Lower:Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 3; 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. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. 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. Use with adequate ventilation. 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 cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Pinacolone	none listed	none listed	none listed

OSHA Vacated PELs: Pinacolone: 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 minimize contact with skin.

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: peppermint odor - camphor

pH: Not available.

Vapor Pressure: 31.5 mm Hg @ 25 deg C

Vapor Density: 3.45 (air=1)

Evaporation Rate: Not available.

Viscosity: 2.47E-03 Pa-sec

Boiling Point: 106 deg C @ 760 mm Hg

Freezing/Melting Point: -52.5 deg C

Decomposition Temperature: Not available.

Solubility: 19 g/L @ 25°C

Specific Gravity/Density: 0.80 g/ml

Molecular Formula: C₆H₁₂O

Molecular Weight: 100.16

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Volatile in steam.

Conditions to Avoid: Ignition sources, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, acrid smoke and fumes.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 75-97-8: EL7700000

LD50/LC50:

CAS# 75-97-8:

Inhalation, mouse: LC50 = 5700 mg/m³;

Oral, mouse: LD50 = 1625 mg/kg;

Oral, rabbit: LD50 = 900 mg/kg;

Oral, rat: LD50 = 610 mg/kg;

Carcinogenicity:

CAS# 75-97-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: Fish: Fathead Minnow: 87 mg/L; 96 hr.; Flow through bioassay No data available.

Environmental: Koc=20 suggests that pinacolone has a very high mobility in soil.

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
Shipping Name:	FLAMMABLE LIQUIDS, N.O.S.	FLAMMABLE LIQUID NOS (PINACOLONE)
Hazard Class:	3	3
UN Number:	UN1993	UN1993
Packing Group:	II	II
Additional Info:		FP 5C

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 75-97-8 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 # 75-97-8: 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 depleters.

This material does not contain any Class 2 Ozone depleters.

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# 75-97-8 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 F

Risk Phrases:

R 11 Highly flammable.

R 22 Harmful if swallowed.

Safety Phrases:

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

S 20/21 When using do not eat, drink or smoke.

S 33 Take precautionary measures against static discharges.

S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection)

CAS# 75-97-8: 1

Canada - DSL/NDSL

CAS# 75-97-8 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2.

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: 12/03/1998

Revision #4 Date: 12/07/2005

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.