

Material Safety Data Sheet

Hexamethyldisiloxane, 98+%

ACC# 80225

Section 1 - Chemical Product and Company Identification

MSDS Name: Hexamethyldisiloxane, 98+%

Catalog Numbers: AC194790000, AC194790100, AC194791000, AC194795000

Synonyms: Bis(trimethylsilyl)ether; Bis(trimethylsilyl)oxide; Oxybis(trimethylsilane).

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
107-46-0	Hexamethyldisiloxane	>98	203-492-7

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless liquid. Flash Point: -3 deg C.

Warning! Flammable liquid and vapor. Breathing vapors may cause drowsiness and dizziness. Causes mild eye irritation. Repeated exposure may cause skin dryness or cracking.

Target Organs: Central nervous system, eyes, skin.

Potential Health Effects

Eye: Causes mild eye irritation.

Skin: Causes mild skin irritation. Not expected to cause an allergic skin reaction. No evidence of sensitization was observed in a human repeated insult patch test with hexamethyldisiloxane.

Ingestion: Ingestion of very large amounts may cause generalized depression, headache, and drowsiness.

Inhalation: High vapor concentrations may cause drowsiness. May cause respiratory tract irritation.

Chronic: Prolonged or repeated skin contact may cause defatting and dermatitis. May be harmful if ingested in large amounts.

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. May accumulate static electrical charges, and may cause ignition of its own vapors. 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: Use water spray or carbon dioxide.

Flash Point: -3 deg C (26.60 deg F)

Autoignition Temperature: 340 deg C (644.00 deg F)

Explosion Limits, Lower: 1.50%

Upper: 14.65%

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. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Wash walking surfaces with detergent and water to reduce slipping hazard.

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. Take precautionary measures against static discharges. Keep away from heat, sparks and flame. Use only with adequate ventilation. Avoid breathing vapor. When heated to temperatures above 150°C in the presence of air, product can form formaldehyde vapors.

Storage: Keep away from sources of ignition. Store in a tightly closed container. Flammables-area. Store in a cool, well-ventilated area away from incompatible substances. Storage under inert gas has been recommended.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Exposure Limits

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

OSHA Vacated PELs: Hexamethyldisiloxane: 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: odorless

pH: Not applicable.

Vapor Pressure: 44 hPa @ 20 deg C

Vapor Density: Not available.

Evaporation Rate: Not available.

Viscosity: 0.65 mm²/s

Boiling Point: 101 deg C @ 760 mm Hg

Freezing/Melting Point: -59 deg C

Decomposition Temperature: Not available.

Solubility: Insoluble.

Specific Gravity/Density: .76 g/ml

Molecular Formula: C₆H₁₈OSi₂

Molecular Weight: 162.38

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 dioxide, silicon dioxide, formaldehyde.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 107-46-0: JM9237000

LD50/LC50:

CAS# 107-46-0:

Draize test, rabbit, eye: 100 uL/24H Mild;

Draize test, rabbit, skin: 500 mg/24H Mild;

Inhalation, rat: LC50 = 15956 ppm/4H;

Skin, rabbit: LD50 = 16 mL/kg;

Rat LDLo Oral: 8 mL/kg = 6.08 g/kg. a pig LDLo Oral: 50 g/kg.

Carcinogenicity:

CAS# 107-46-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No data available.

Teratogenicity: No data available.

Reproductive Effects: No data available.

Mutagenicity: No data available.

Neurotoxicity: No data available.

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: This product has a very low water solubility (< 100 ppb). As it has a specific gravity of < 1, if discharged to water, it will initially form a surface film. However, as it is very volatile, the product will rapidly evaporate into the air. The aquatic half life is estimated at between 1-5 days.

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 (HEXAMETHYLDISILOXANE)
Hazard Class:	3	3
UN Number:	UN1993	UN1993
Packing Group:	II	II
Additional Info:		FP -1C

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 107-46-0 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 # 107-46-0: 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 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# 107-46-0 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:

F

Risk Phrases:

R 11 Highly flammable.

Safety Phrases:

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

WGK (Water Danger/Protection)

CAS# 107-46-0: 1

Canada - DSL/NDSL

CAS# 107-46-0 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2, 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: 9/02/1997

Revision #3 Date: 6/21/2004

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.