# Material Safety Data Sheet 2-Methylhexane, 99%

ACC# 19527

# Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Methylhexane, 99%

Catalog Numbers: AC126910000, AC126910050 Synonyms: Isoheptane.

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
591-76-4	2-Methylhexane	99	209-730-6

## 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 eye, skin, and respiratory tract irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage.

Target Organs: Central nervous system, lungs, eyes, skin.

### **Potential Health Effects**

**Eye:** Causes eye irritation. **Skin:** Causes skin irritation.

**Ingestion:** May cause 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. Inhalation of vapors may cause drowsiness and dizziness.

Chronic: No information found.

# 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 immediately

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. **Ingestion:** Potential for aspiration if swallowed. Get medical aid immediately. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If vomiting occurs naturally, have victim lean forward.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

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 may form an explosive mixture with air. 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. This liquid floats on water and may travel to a source of ignition and spread fire.

**Extinguishing Media:** Use water spray to cool fire-exposed containers. Use foam, dry chemical, or carbon dioxide. Water may be ineffective.

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

Autoignition Temperature: 220 deg C ( 428.00 deg F)

Explosion Limits, Lower: 1.00 vol %

**Upper:** 6.00 vol %

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. Provide ventilation.

# 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. Take precautionary measures against static discharges. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Keep away from heat, sparks and flame. Avoid breathing vapor.

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:** Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Methylhexane	400 ppm TWA (listed under Heptane (n-)).500 ppm STEL (listed under Heptane (n-)).	85 ppm TWA; 350 mg/m3 TWA (listed under Heptane (n-)).750 ppm IDLH (listed under Heptane (n- )).	500 ppm TWA; 2000 mg/m3 TWA (listed under Heptane (n-)).

OSHA Vacated PELs: 2-Methylhexane: 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: Gasoline-like odor pH: Not applicable.

Vapor Pressure: 66 mm Hg @ 25 deg C

Vapor Density: 3.45 (air=1) Evaporation Rate:Not available. Viscosity: Not available.

**Boiling Point:** 90 deg C @ 760 mm Hg **Freezing/Melting Point:**-118 deg C **Decomposition Temperature:**Not available.

Solubility: Insoluble.

Specific Gravity/Density:0.67 g/ml

Molecular Formula:C7H16 Molecular Weight:100.20

# Section 10 - Stability and Reactivity

**Chemical Stability:** Stable under normal temperatures and pressures. **Conditions to Avoid:** High temperatures, ignition sources, confined spaces. **Incompatibilities with Other Materials:** Strong oxidizing agents. **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

# Section 11 - Toxicological Information

RTECS#:

**CAS#** 591-76-4: MO3871500

**LD50/LC50:** Not available.

Carcinogenicity:

CAS# 591-76-4: 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

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:	DOT regulated - small quantity provisions apply (see 49CFR173.4)	Heptanes
Hazard Class:		3
UN Number:		UN1206
Packing Group:		II

# Section 15 - Regulatory Information

## **US FEDERAL**

#### **TSCA**

CAS# 591-76-4 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.

**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# 591-76-4 can be found on the following state right to know lists: California, (listed as Heptane (n-)), New Jersey, (listed as Heptane (n-)), Pennsylvania, Minnesota, (listed as Heptane (n-)), 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:**

XNFN

### **Risk Phrases:**

R 11 Highly flammable.

R 38 Irritating to skin.

R 50/53 Very toxic to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

R 67 Vapours may cause drowsiness and dizziness.

### 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.
- S 60 This material and its container must be disposed of as hazardou
- s waste.
- S 61 Avoid release to the environment. Refer to special instructions

/safety data sheets.

S 62 If swallowed, do not induce vomiting: seek medical advice immed iately and show this container or label.

### WGK (Water Danger/Protection)

CAS# 591-76-4: No information available.

Canada - DSL/NDSL

CAS# 591-76-4 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**

CAS# 591-76-4 (listed as Heptane (n-)) is listed on the Canadian Ingredient Disclosure List.

## Section 16 - Additional Information

MSDS Creation Date: 9/02/1997 Revision #3 Date: 1/20/2004

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.