# Material Safety Data Sheet Isobutylbenzene, 99.5%

ACC# 83649

# Section 1 - Chemical Product and Company Identification

MSDS Name: Isobutylbenzene, 99.5%

Catalog Numbers: AC150960000, AC150961000, AC150965000 Synonyms: 2-Methyl-1-phenylpropane; (2-Methylpropyl)benzene; IBB.

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
538-93-2	Isobutylbenzene	99.5	208-706-2

## Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

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

**Warning!** Flammable liquid and vapor. Causes eye, skin, and respiratory tract irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause central nervous system depression. Marine pollutant.

Target Organs: Central nervous system, lungs.

#### **Potential Health Effects**

Eye: Causes eye irritation.

Skin: Causes skin irritation. Prolonged or repeated contact may dry/defat the skin and cause irritation.

**Ingestion:** Aspiration hazard. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. Ingestion of large amounts may cause CNS depression.

Inhalation: Causes respiratory tract irritation. Inhalation at high concentrations may cause CNS depression and asphixiation.

Chronic: No information found.

## 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 imme diately.

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**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:** 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. Flammable liquid and vapor. Vapors may form an explosive mixture with air. Containers may explode when heated. 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 fog or spray, dry chemical, foam or carbon dioxide.

Flash Point: 55 deg C (131.00 deg F)

Autoignition Temperature: 427 deg C ( 800.60 deg F)

Explosion Limits, Lower: 80 vol %

**Upper:** 6.00 vol %

NFPA Rating: (estimated) Health: 2; 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. 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. 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 or mist.

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

# 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 general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

**Exposure Limits** 

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

OSHA Vacated PELs: Isobutylbenzene: 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: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard

EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: clear colorless
Odor: sweet, aromatic
pH: Not available.

Vapor Pressure: 1.93 mm Hg @ 25 deg C

Vapor Density: 4.6 (air=1)
Evaporation Rate:Not available.
Viscosity: 1.05 cP 20 deg C

**Boiling Point:** 170 deg C @ 736 mm Hg **Freezing/Melting Point:**-51 deg C **Decomposition Temperature:**Not available.

**Solubility:** insoluble

Specific Gravity/Density:.8500 Molecular Formula:C10H14 Molecular Weight:134.22

# 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.

Hazardous Polymerization: Will not occur.

# Section 11 - Toxicological Information

RTECS#:

CAS# 538-93-2: DA3550000

LD50/LC50: Not available.

The mean 24-hour Draize eye irritation score in rabbits is 2.0/110. For a 24-hour exposure, the Primary Skin Irritation Score in rabbits is 0/8. The acute oral LD50 in rats is 3321 mg/kg. The LC50 of this material is > 1032 ppm. Slight to moderate upper airway irritancy was observed in male mice at approximately 200 ppm. This material was tested in the Ames Test, the Mouse Lymphoma Forward Mutational Assay and the In Vitro Sister Chromatid Exchange assay and found to be non-mutagenic. (Chevron Phillips)

Carcinogenicity:

CAS# 538-93-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found Teratogenicity: No information found Reproductive Effects: No information found Mutagenicity: No information found Neurotoxicity: No information found

Other Studies:

# Section 12 - Ecological Information

Ecotoxicity: Algae: 35 mg/l; 96 hr; LC50 Sheepshead minnow: > 200 mg/l; 96 hr; LC50

## 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:	BUTYL BENZENES	Butylbenzenes
Hazard Class:	3	3
UN Number:	UN2709	UN2709
Packing Group:	III	III

# Section 15 - Regulatory Information

## **US FEDERAL**

#### **TSCA**

CAS# 538-93-2 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# 538-93-2 can be found on the following state right to know lists: Pennsylvania, 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:

ΧN

#### **Risk Phrases:**

R 10 Flammable.

R 65 Harmful: may cause lung damage if swallowed.

#### **Safety Phrases:**

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

# WGK (Water Danger/Protection)

CAS# 538-93-2: No information available.

## Canada - DSL/NDSL

CAS# 538-93-2 is listed on Canada's DSL List.

## Canada - WHMIS

This product has a WHMIS classification of B3, 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: 7/06/1999 Revision #5 Date: 3/18/2004

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.