Material Safety Data Sheet
Azobenzene

Section 1 - Chemical Product and Company Identification

MSDS Name: Azobenzene
Catalog Numbers: 26890-0000, 26890-0050, 26890-0500, 26890-1000, 40154-0000, 40154-0050, 40154-0500, 40154-1000
Synonyms: 1,2-Diphenyldiazene

Company Identification:
Acros Organics BVBA
Janssen Pharmaceuticaan 3a
2440 Geel, Belgium

Acros Organics

Company Identification: (USA)
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS# Chemical Name: % EINECS#
103-33-3 Azobenzene >94% 203-102-5

Hazard Symbols: T N

Risk Phrases: 45 20/22 48/22 50/53 68

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Harmful by inhalation and if swallowed. May cause cancer. Harmful: danger of serious damage to health by prolonged exposure if swallowed. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Possible risk of irreversible effects.
Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation. May be harmful if absorbed through the skin.
Ingestion: Harmful if swallowed. May cause irritation of the digestive tract.
Inhalation: Harmful if inhaled. May cause respiratory tract irritation.
Chronic: May cause cancer in humans. Possible risk of irreversible effects.

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 immediately.
Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Ingestion: Get medical aid immediately. Wash mouth out with water.
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:

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.
Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.
Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Do not let this chemical enter the environment.

Section 7 - Handling and Storage

Handling: Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use only in a chemical fume hood.
Storage: Store in a cool, dry place. Store in a tightly closed container. Store under an inert atmosphere.

Section 8 - Exposure Controls, Personal Protection

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

CAS# 103-33-3:
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.

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: Crystalline powder
Color: orange
Odor: Not available
pH: Not available
Vapor Pressure: 1mmHg @104 deg C
Viscosity: Not available
Boiling Point: 293 deg C @760mmHg ( 559.40°F)
Freezing/Melting Point: 66 - 69 deg C
Autoignition Temperature: 477 deg C ( 890.60 deg F)
Flash Point: 100 deg C ( 212.00 deg F)
Explosion Limits: Lower: Not available
Explosion Limits: Upper: Not available
Decomposition Temperature: Not available
Solubility in water: Insoluble
Specific Gravity/Density: Not available.
Molecular Formula: C12H10N2
Molecular Weight: 182.23
Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials.
Incompatibilities with Other Materials: Strong oxidizing agents.
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: CAS# 103-33-3: CN1400000

RTECS: CAS# 103-33-3: Oral, rat: LD50 = 1 gm/kg;

Azobenzene - California: carcinogen, initial date 1/1/90 IARC: Group 3 Carcinogenicity: (not classifiable)

Other: See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

Section 12 - Ecological Information

Ecotoxicity: Not available

Other: Do not empty into drains.
Log POW: 3.8

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

IATA ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.*
IMO ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
RID/ADR ENVIROMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class: 9
UN Number: 3077
Packing Group: III
Severe Marine Pollutant

Section 15 - Regulatory Information

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

R 45 May cause cancer.
R 20/22 Harmful by inhalation and if swallowed.
R 48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R 68 Possible risk of irreversible effects.

Safety Phrases:

S 53 Avoid exposure - obtain special instructions before use.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 60 This material and its container must be disposed of as hazardous waste.
S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)
CAS# 103-33-3: 2

Canada

CAS# 103-33-3 is listed on Canada's DSL List

US Federal

TSCA

CAS# 103-33-3 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 7/16/1996
Revision #1 Date 1/17/2005
Revisions were made in Sections: General revision.

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 the company 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 the company has been advised of the possibility of such damages.

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