

**** MATERIAL SAFETY DATA SHEET ****

4-Bromoaniline, 99+%

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 4-Bromoaniline, 99+%

Catalog Numbers:

14628-0000, 14628-0050, 14628-0250, 14628-1000

Synonyms:

Company Identification (Europe): Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium

Company Identification (USA): Acros Organics
 One Reagent Lane
 Fairlawn, NJ 07410

For information in North America, call: 800-ACROS-01

For information in Europe, call: 0032(0) 14575211

For emergencies in the US, call CHEMTREC: 800-424-9300

For emergencies in Europe, call: 0032(0) 14575299

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#	Haz Symbols	Risk Phrases
106-40-1	4-Bromoaniline	99+%	203-393-9		

Hazard Symbols: XN

Risk Phrases: 20/21/22 33 36/37/38 43

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Harmful by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eye:

Causes eye irritation. Causes redness and pain.

Skin:

Causes skin irritation. Harmful if absorbed through the skin. Causes redness and pain. May cause sensitization by skin contact.

Ingestion:

Harmful if swallowed. May cause irritation of the digestive tract. May cause nausea, vomiting, headache, cramps, chills and drowsiness.

Inhalation:

Harmful if inhaled. Causes respiratory tract irritation. May cause coughing, choking, chills, fever, tightness in the chest, and cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

Chronic:

May cause liver and kidney damage. May cause methemoglobinemia, which is characterized by chocolate-brown colored blood, headache, weakness, dizziness, breath shortness, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate, unconsciousness and possible death. May cause anemia and other blood cell abnormalities. There is a danger of cumulative effects.

**** 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.

Skin:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

Get medical aid. Wash mouth out with water.

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:****** 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.

****** SECTION 7 - HANDLING and STORAGE ********Handling:**

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a cool, dry place. Do not store in direct sunlight. Store in a tightly closed container. Keep away from acids.

****** 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 ventilation to keep airborne concentrations low.

Personal Protective Equipment**Eyes:**

Wear chemical 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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

****** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ******

Physical State: Crystalline powder
Color: grey - brown
Odor: characteristic odor

pH: 3.7-4.0
Vapor Pressure: 0.23mbar @25 deg C
Viscosity: Not available.
Boiling Point: 230 - 250 deg C
Freezing/Melting Point: 60 - 64 deg C
Autoignition Temperature: Not available.
Flash Point: > 110 deg C (> 230.00 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: >230 deg C
Solubility in water: < 0.1 g / 100 ml
Specific Gravity/Density: 1.497
Molecular Formula: C6H6BrN
Molecular Weight: 172.02

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:

Stable under normal temperatures and pressures. Light sensitive.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Oxidizing agents, acids, acid chlorides, acid anhydrides, chloroformates.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide, hydrogen bromide.

Hazardous Polymerization: Will not occur.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:

CAS# 106-40-1: BW9280000

LD50/LC50:

CAS# 106-40-1: Oral, mouse: LD50 = 289 mg/kg; Oral, rat: LD50 = 456 mg/kg.

Carcinogenicity:

4-Bromoaniline -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

See actual entry in RTECS for complete information.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Ecotoxicity:

Fish: Fathead Minnow: 47.5 mg/L; 96H; LC50Log Pow: 2.3Calculated
biocentration factor = 4.4

Other

Dangerous to aquatic life in high concentrations.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

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

**** SECTION 14 - TRANSPORT INFORMATION ****

IATA

Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.*

Hazard Class: 6.1

UN Number: 2811

Packing Group: III

IMO

Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: 2811

Packing Group: III

RID/ADR

Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class: 6.1
UN Number: 2811
Packing group: III

**** SECTION 15 - REGULATORY INFORMATION ****

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 33 Danger of cumulative effects.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 43 May cause sensitization by skin contact.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 61 Avoid release to the environment. Refer to special instructions/safety data sheets.

WGK (Water Danger/Protection)

CAS# 106-40-1: No information available.

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 106-40-1 is listed on Canada's DSL List.

CAS# 106-40-1 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 106-40-1: Not available.

US FEDERAL

TSCA

CAS# 106-40-1 is listed on the TSCA inventory.

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/16/1996 Revision #2 Date: 3/08/2004

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