



MATERIAL SAFETY DATA SHEET

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2-Nitrotoluene, 99+%

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: 2-Nitrotoluene, 99+%

Catalog Numbers:

12903-0000, 12903-0010, 12903-0025, 12903-0050

Synonyms:

alpha-Methylnitrobenzene

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#	:	88-72-2
Chemical Name	:	2-Nitrotoluene
%	:	99+%
EINECS#	:	201-853-3
Haz Symbols	:	T N
Risk Phrases	:	23/24/25 33

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Toxic by inhalation, in contact with skin and if swallowed. Danger of cumulative effects. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Potential Health Effects

Eye:

Causes mild eye irritation.

Skin:

Toxic in contact with skin.

Ingestion:

May cause irritation of the digestive tract. May form methemoglobin which in sufficient concentration causes cyanosis (bluish discoloration of skin due to deficient oxygenation of the blood).

Toxic if swallowed.

Inhalation:

May cause respiratory tract irritation. Toxic if inhaled.

Chronic:

Not available.

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:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

SECTION 7 - HANDLING and STORAGE

Handling:

Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

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: Clear liquid

Color: yellow to yellow-green

Odor: Not available.

pH: Not available.

Vapor Pressure: 0.16mbar @20 deg C

Viscosity: Not available.

Boiling Point: 222 deg C

Freezing/Melting Point: -9 deg C

Autoignition Temperature: 420 deg C (788.00 deg F)

Flash Point: 95 deg C (203.00 deg F)

Explosion Limits, lower: 1.47 Vol %

Explosion Limits, upper: 8.8 Vol %

Decomposition Temperature:

Solubility in water: 0.44 g/l (20° C)

Specific Gravity/Density: 1.160

Molecular Formula: C7H7NO2

Molecular Weight: 137.14

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Oxidizing agents, reducing agents, strong bases, alkalies, amines.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 88-72-2: XT3150000

LD50/LC50:

CAS# 88-72-2: Inhalation, mouse: LC50 = 328 mg/m³; Inhalation, rat: LC50 = 790 mg/m³; Oral, mouse: LD50 = 970 mg/kg; Oral, rabbit: LD50 = 1750 mg/kg; Oral, rat: LD50 = 891 mg/kg.

Carcinogenicity:

2-Nitrotoluene -

California: carcinogen; initial date 5/15/98

See actual entry in RTECS for complete information.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish: Zebrafish: LC50: 65mg/L; 96h; .Fish: Leuciscus idus: LC50: 25mg/L; 48h; .Log Pow: 2.3

Other

Not readily biodegradable.

SECTION 13 - DISPOSAL CONSIDERATIONS

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

SECTION 14 - TRANSPORT INFORMATION

IATA

Shipping Name: NITROTOLUENES, LIQUID

Hazard Class: 6.1

UN Number: 1664

Packing Group: II

IMO

Shipping Name: NITROTOLUENES, LIQUID

Hazard Class: 6.1

UN Number: 1664

Packing Group: II

RID/ADR

Shipping Name: NITROTOLUENES, LIQUID

Hazard Class: 6.1

UN Number: 1664

Packing group: II

USA RQ: CAS# 88-72-2: 1000 lb final RQ (Listed under Nitrotoluene); 454 kg final RQ (Listed under Nitr

SECTION 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: T N

Risk Phrases:

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R 33 Danger of cumulative effects.

R 51/53 Toxic to aquatic organisms, may cause

long-term adverse effects in the aquatic environment.

Safety Phrases:

S 28B After contact with skin, wash immediately with plenty of water and soap.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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

WGK (Water Danger/Protection)

CAS# 88-72-2: 3

United Kingdom Occupational Exposure Limits

United Kingdom Maximum Exposure Limits

Canada

CAS# 88-72-2 is listed on Canada's DSL List.

CAS# 88-72-2 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 88-72-2: OEL-AUSTRALIA:TWA 2 ppm (11 mg/m³);Skin

OEL-BELGIUM:TWA 2 ppm (11 mg/m³);Skin

OEL-DENMARK:TWA 2 ppm (12 mg/m³);Skin

OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH TLV

OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

US FEDERAL

TSCA

CAS# 88-72-2 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

MSDS Creation Date: 7/16/1996 Revision #1 Date: 6/11/2004

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 way 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.