Material Safety Data Sheet
2-Nitrotoluene, 99+%

ACC# 31987

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-Nitrotoluene, 99+%
Catalog Numbers: AC129030010, AC129030025, AC129030050
Synonyms: 1-Methyl-2-nitrobenzene; o-Methylnitrobenzene; o-Nitrotoluene; 2-Methylnitrobenzene.
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
88-72-2	2-Nitrotoluene	> 99	201-853-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: yellow liquid.
Danger! May be fatal if inhaled. Causes respiratory tract irritation. Causes eye and skin irritation. May be harmful if swallowed.
Target Organs: None.

Potential Health Effects
Eye: Causes mild eye irritation.
Skin: Causes mild skin irritation.
Ingestion: Aspiration hazard. May be harmful if swallowed. Causes digestive tract irritation.
Inhalation: May be fatal if inhaled. Causes respiratory tract irritation. Aspiration may cause respiratory swelling and pneumonitis.
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: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.
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. Containers may explode when heated.
Extinguishing Media: Use water spray to cool fire-exposed containers. Do NOT use straight streams of water. For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use water spray, fog or regular foam.
Flash Point: 106 deg C (222.80 deg F)
Autoignition Temperature: 305 deg C (581.00 deg F)
Explosion Limits, Lower:2.2%
Upper: Not available.
NFPA Rating: (estimated) Health: 3; Flammability: 1; Instability: 1

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. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Keep away from heat, sparks and flame. Do not ingest or inhale.
Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.
Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-Nitrotoluene	2 ppm TWA; Skin - potential significant contribution to overall exposure by the cutaneous r oute	2 ppm TWA; 11 mg/m3 TWA 200 ppm IDLH	5 ppm TWA; 30 mg/m3 TWA (Listed under 'Nitrotoluene')

OSHA Vacated PELs: 2-Nitrotoluene: 2 ppm TWA; 11 mg/m3 TWA (Listed under 'Nitrotoluene')
Personal Protective Equipment
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
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: yellow
Odor: almond-like
pH: Not available.
Vapor Pressure: 0.15 mm Hg @ 20 deg C
Vapor Density: 4.73
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 222 deg C
Freezing/Melting Point:-4 to -3 deg C
Decomposition Temperature:270 deg C
Solubility: Insoluble.
Specific Gravity/Density:1.1630g/cm3
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, excess heat.
Incompatibilities with Other Materials: Oxidizing agents
Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide, nitrogen.
Hazardous Polymerization: Has not been reported.

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;
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Carcinogenicity:
CAS# 88-72-2:

- **ACGIH:** Not listed.
- **California:** carcinogen, initial date 5/15/98
- **NTP:** Not listed.
- **IARC:** Not listed.

Epidemiology: No Data.
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:	NITROTOLUENES	NITROTOLUENES LIQUID
Hazard Class:	6.1	6.1
UN Number:	UN1664	UN1664
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA
CAS# 88-72-2 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
CAS# 88-72-2: 1000 lb final RQ (Listed under Nitrotoluene); 454 kg final RQ (Listed under Nitr
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 88-72-2: immediate, delayed, reactive.
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:
CAS# 88-72-2 is listed as a Hazardous Substance 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# 88-72-2 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

California Prop 65
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:
WARNING: This product contains 2-Nitrotoluene, a chemical known to the state of California to cause cancer.
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:
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 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 28B After contact with skin, wash immediately with plenty of water and soap.
S 61 Avoid release to the environment. Refer to special instructions /safety data sheets.

WGK (Water Danger/Protection)

CAS# 88-72-2: 3

Canada - DSL/NDSL

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

Canada - WHMIS

This product has a WHMIS classification of D1A, 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# 88-72-2 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 9/17/1998
Revision #4 Date: 10/03/2005