

ALFAAL13112

3-Methyl-4-nitroaniline

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| 产品说明: | 3-甲基-4-硝基苯胺 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description: | 3-Methyl-4-nitroaniline |
| Cat No. : | L13112 |
| CAS No | 611-05-2 |
| Molecular Formula | C7 H8 N2 O2 |
| Supplier | Avocado Research Chemicals Ltd. (Part of Thermo Fisher Scientific) Shore Road, Heysham Lancashire, LA3 2XY, United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608 |
| Emergency Telephone Number | For information US call: 001-800-227-6701 / Europe call: +32 14 57 52 11 Emergency Number US :001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No. US :001-800-424-9300 / Europe: 001-703-527-3887 |
| E-mail address | begel.sdsdesk@thermofisher.com |
| Recommended Use | Laboratory chemicals. |
| Uses advised against | No Information available |

SECTION 2. HAZARD IDENTIFICATION

| Physical State | |
|----------------|--|
| Solid | |

Appearance Yellow Odor Characteristic

Emergency Overview

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.

Classification of the substance or mixture

| Acute Oral Toxicity | Category 3 |
|------------------------------------------------------|------------|
| Acute Dermal Toxicity | Category 3 |
| Acute Inhalation Toxicity - Dusts and Mists | Category 3 |
| Specific target organ toxicity - (repeated exposure) | Category 2 |
| Chronic aquatic toxicity | Category 2 |

Label Elements



3-Methyl-4-nitroaniline

Signal Word

Danger

Hazard Statements

H373 - May cause damage to organs through prolonged or repeated exposure H411 - Toxic to aquatic life with long lasting effects H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled

Precautionary Statements

Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling

- P270 Do not eat, drink or smoke when using this product
- P271 Use only outdoors or in a well-ventilated area

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Response

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P311 - Call a POISON CENTER or doctor

P330 - Rinse mouth

P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Physical and Chemical Hazards

None identified.

Health Hazards

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. May cause damage to organs through prolonged or repeated exposure.

Environmental hazards

Toxic to aquatic life with long lasting effects. Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

This product does not contain any known or suspected endocrine disruptors.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS No | Weight % |
|---------------------|----------|----------|
| 4-Nitro-m-toluidine | 611-05-2 | <=100 |

SECTION 4. FIRST AID MEASURES

General Advice

Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.

Eye Contact

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion

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Do NOT induce vomiting. Call a physician or poison control center immediately.

Most important symptoms and effects

None reasonably foreseeable.

Self-Protection of the First Aider

No special precautions required.

Notes to Physician

Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons

No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

Environmental Precautions

Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Refer to protective measures listed in Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

Handling

Wear personal protective equipment/face protection. Avoid dust formation. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance.

Storage

Keep container tightly closed in a dry and well-ventilated place.

Specific Use(s)

Use in laboratories

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

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Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

Exposure Controls

Engineering Measures

None under normal use conditions. .

Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (European standard - EN 166)

Hand Protection Protective gloves

| Glove material Natural rubber Nitrile rubber Neoprene | Breakthrough time See manufacturers recommendations | Glove thickness - | EU standard EN 374 | Glove comments (minimum requirement) |
|-----------------------------------------------------------------------|-----------------------------------------------------------|----------------------|-----------------------|-----------------------------------------|
| PVC | | | | |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

| Skin and body protection | Long sleeved clothing |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Respiratory Protection | No protective equipment is needed under normal use conditions. |
| Large scale/emergency use | Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particle filter |
| Small scale/Laboratory use | Maintain adequate ventilation Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN 141 |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |
| Environmental exposure controls | Prevent product from entering drains. Do not allow material to contaminate ground water system. |

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance | Yellow |
|---------------------|---------------------------------|
| Physical State | Solid |
| Odor | Characteristic |
| Odor Threshold | No data available |
| pH | No information available |
| Melting Point/Range | 133 - 137 °C / 271.4 - 278.6 °F |
| Softening Point | No data available |
| Boiling Point/Range | No information available |

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| Flash Point | No information available | Method - No information available | |
|-----------------------------------------|--------------------------|-----------------------------------|--|
| Evaporation Rate | Not applicable | Solid | |
| Flammability (solid,gas) | No information available | | |
| Explosion Limits | No data available | | |
| Vapor Pressure | No data available | | |
| Vapor Density | Not applicable | Solid | |
| Specific Gravity / Density | No data available | | |
| Bulk Density | No data available | | |
| Water Solubility | Insoluble in water | | |
| Solubility in other solvents | No information available | | |
| Partition Coefficient (n-octanol/water) | | | |
| Autoignition Temperature | No data available | | |
| Decomposition Temperature | No data available | | |
| Viscosity | Not applicable | Solid | |
| Explosive Properties | No information available | | |
| Oxidizing Properties | No information available | | |
| Molecular Formula Molecular Weight | C7 H8 N2 O2 152.15 | | |
| | | | |

SECTION 10. STABILITY AND REACTIVITY

| Stability | Stable under normal conditions. |
|-------------------------------------------------|------------------------------------------------------------|
| Hazardous Reactions Hazardous Polymerization | None under normal processing. No information available. |
| Conditions to Avoid | None known. |
| Materials to avoid | No information available. |

Hazardous Decomposition Products None under normal use conditions.

SECTION 11. TOXICOLOGICAL INFORMATION

- (a) acute toxicity;
- (b) skin corrosion/irritation; No data available
- (c) serious eye damage/irritation; No data available
- (d) respiratory or skin sensitization;

 Respiratory
 No data available

 Skin
 No data available
- (e) germ cell mutagenicity; No data available
- (f) carcinogenicity; No data available
 - There are no known carcinogenic chemicals in this product
- (g) reproductive toxicity; No data available

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| (h) STOT-single exposure; | No data available |
|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (i) STOT-repeated exposure; | Category 2 |
| Target Organs | None known. |
| (j) aspiration hazard; | Not applicable Solid |
| Symptoms / effects,both acute and delayed | No information available |
| | SECTION 12. ECOLOGICAL INFORMATION |
| Ecotoxicity effects | Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment. |
| Persistence and Degradability Persistence Degradation in sewage treatment plant | Insoluble in water. Contains substances known to be hazardous to the environment or not degradable in waster water treatment plants. |
| Bioaccumulative Potential | May have some potential to bioaccumulate |
| Mobility in soil | Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility |
| Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential | This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance |
| | SECTION 13. DISPOSAL CONSIDERATIONS |
| Waste from Residues/Unused Products | Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. |
| Contaminated Packaging | Dispose of this container to hazardous or special waste collection point. |
| Other Information | Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not let this chemical enter the environment. |
| | SECTION 14. TRANSPORT INFORMATION |

UN-NoUN2660Proper Shipping NameNITROTOLUIDINES (MONO)Hazard Class6.1Packing GroupIII

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IMDG/IMO

| UN-No Proper Shipping Name Hazard Class Packing Group Marine Pollutant | UN2660 NITROTOLUIDINES (MONO) 6.1 III This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| IATA | |
| UN-No Proper Shipping Name Hazard Class Packing Group | UN2660 NITROTOLUIDINES (MONO) 6.1 III |
| Special Precautions for User | No special precautions required |

SECTION 15. REGULATORY INFORMATION

International Inventories

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

| Component | | List of dangerous goods GB 12268 - 2012 | TCSI | IECSC | EINECS | TSCA | DSL | PICCS | ENCS | ISHL | AICS | KECL |
|---------------------|---|-----------------------------------------------------|------|-------|-----------|------|-----|-------|------|------|------|------|
| 4-Nitro-m-toluidine | - | - | X | - | 210-247-8 | - | - | - | Х | Х | - | - |

National Regulations

SECTION 16. OTHER INFORMATION

| Prepared By | Health, Safety and Environmental Department |
|------------------|----------------------------------------------------|
| Revision Date | 02-May-2024 |
| Revision Summary | New emergency telephone response service provider. |

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Legend

| CAS - Chemical Abstracts Service | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------|
| EINECS/ELINCS - European Inventory of Existing Commercial Chemical | DSL/NDSL - Canadian Domestic Substances List/Non-Domestic |
| Substances/EU List of Notified Chemical Substances | Substances List |
| PICCS - Philippines Inventory of Chemicals and Chemical Substances | ENCS - Japanese Existing and New Chemical Substances |
| IECSC - Chinese Inventory of Existing Chemical Substances | AICS - Australian Inventory of Chemical Substances |
| KECL - Korean Existing and Evaluated Chemical Substances | NZIOC - New Zealand Inventory of Chemicals |

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| WEL - Workplace Exposure Limit | TWA - Time Weighted Average |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| ACGIH - American Conference of Governmental Industrial Hygienists | IARC - International Agency for Research on Cancer |
| DNEL - Derived No Effect Level | PNEC - Predicted No Effect Concentration |
| RPE - Respiratory Protective Equipment | LD50 - Lethal Dose 50% |
| LC50 - Lethal Concentration 50% | EC50 - Effective Concentration 50% |
| NOEC - No Observed Effect Concentration | POW - Partition coefficient Octanol:Water |
| PBT - Persistent, Bioaccumulative, Toxic | vPvB - very Persistent, very Bioaccumulative |
| ICAO/IATA - International Civil Aviation Organization/International Air Transport Association | IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code |
| ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road | MARPOL - International Convention for the Prevention of Pollution from Ships |
| OECD - Organisation for Economic Co-operation and Development | ATE - Acute Toxicity Estimate |
| BCF - Bioconcentration factor | VOC - (Volatile Organic Compound) |
| Key literature references and sources for data https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, | RTECS |

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet