# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

Page 1/7
Revision Date 22-Apr-2024
Version 3

ALFAAB23009

## **Methyl 2-nitrobenzoate**

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

产品说明: 2-硝基苯甲酸甲酯 Product Description: Methyl 2-nitrobenzoate

Cat No. : B23009

Synonyms Benzoic Acid, 2-Nitro-, Methyl Ester.; Methyl Ortho-Nitrobenzoate

CAS No 606-27-9 Molecular Formula C8 H7 N O4

**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 Appearance Odor

Liquid Amber No information available

**Emergency Overview** 

The product contains no substances which at their given concentration are considered to be hazardous to health.

## Classification of the substance or mixture

Based on available data, the classification criteria are not met

## **Label Elements**

None required

## **Physical and Chemical Hazards**

None identified.

## **Health Hazards**

The product contains no substances which at their given concentration are considered to be hazardous to health.

## **Environmental hazards**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Page 2/7 Revision Date 22-Apr-2024

## Methyl 2-nitrobenzoate

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

## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight %		
Benzoic acid, 2-nitro-, methyl ester	606-27-9	99		

## **SECTION 4. FIRST AID MEASURES**

## **Eye Contact**

Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

#### **Skin Contact**

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. Take off contaminated clothing and shoes immediately.

#### Inhalation

Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.

## Ingestion

Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.

#### Most important symptoms and effects

No information available.

## 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.

## **Environmental Precautions**

See Section 12 for additional Ecological Information.

Page 3/7 Revision Date 22-Apr-2024

Methyl 2-nitrobenzoate

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

#### Handling

Avoid contact with skin and eyes. Avoid contact with skin and clothing. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Avoid breathing vapors or mists. Do not ingest. If swallowed then seek immediate medical assistance. Wash thoroughly after handling.

#### Storage

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

## Specific Use(s)

Use in laboratories

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

## **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 Butyl rubber Nitrile rubber	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)
Neoprene PVC				

Inspect gloves before use.

Skin and body protection

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.

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

Wear appropriate protective gloves and clothing to prevent skin exposure

Small scale/Laboratory use Maintain adequate ventilation

Recommended half mask:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

Page 4/7 Revision Date 22-Apr-2024

## Methyl 2-nitrobenzoate

141

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** No information available.

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Liquid

Liquid

**Appearance** Amber **Physical State** Liquid

No information available Odor **Odor Threshold** No data available pН No information available -13 °C / 8.6 °F **Melting Point/Range Softening Point** No data available

**Boiling Point/Range** 95 - 106 °C / 203 - 222.8 °F

@ 1 mmHg > 112 °C / > 233.6 °F Method - No information available **Flash Point** 

**Evaporation Rate** No data available Flammability (solid,gas) Not applicable

**Explosion Limits** No data available

**Vapor Pressure** No data available

**Vapor Density** 6.24 (Air = 1.0)

Specific Gravity / Density 1.280

**Bulk Density** Not applicable

No information available Water Solubility No information available Solubility in other solvents

Partition Coefficient (n-octanol/water)

No data available **Autoignition Temperature** No data available **Decomposition Temperature Viscosity** No data available **Explosive Properties** No information available **Oxidizing Properties** No information available

Molecular Formula C8 H7 N O4 **Molecular Weight** 181.15

## **SECTION 10. STABILITY AND REACTIVITY**

Stability Stable under normal conditions.

**Hazardous Reactions** No information available. **Hazardous Polymerization** No information available.

**Conditions to Avoid** None known.

Materials to avoid Oxidizing agent.

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

## **SECTION 11. TOXICOLOGICAL INFORMATION**

**Product Information** No acute toxicity information is available for this product

(a) acute toxicity;

Page 5/7 Revision Date 22-Apr-2024

## Methyl 2-nitrobenzoate

(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

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available

delayed

## **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity effects Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

Persistence and Degradability No information available

Bioaccumulative Potential No information available

Mobility in soil No information available

**Endocrine Disruptor Information Persistent Organic Pollutant** 

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

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Consult local, regional, and national hazardous waste regulations to

ensure complete and accurate classification.

Page 6 / 7 Revision Date 22-Apr-2024

Methyl 2-nitrobenzoate

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Waste codes should be assigned by the user based on the application for which the product

was used.

#### **SECTION 14. TRANSPORT INFORMATION**

Road and Rail Transport Not Regulated

IMDG/IMO Not regulated

IATA Not regulated

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
Benzoic acid, 2-nitro-, methyl ester	-	-	X	-	210-111-8	Х	Х	-	Х	Х	Х	-

## **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 22-Apr-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

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

Page 7/7 Revision Date 22-Apr-2024

## Methyl 2-nitrobenzoate

\_\_\_\_\_

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment **LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration **PBT** - Persistent, Bioaccumulative, Toxic

ICAO/IATA - International Civil Aviation Organization/International Air

Transport Association

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%
POW - Partition coefficient Octanol:Water
vPvB - very Persistent, very Bioaccumulative

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**MARPOL** - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate
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**