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ALFAAL16001

# 2-Methoxy-5-methylphenyl isocyanate

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

产品说明:	2-甲氧基-5-甲基苯基异氰酸酯
Product Description:	2-Methoxy-5-methylphenyl isocyanate
Cat No. :	L16001
Synonyms	2-Isocyanato-1-methoxy-4-methyl-benzene
CAS No	59741-04-7
Molecular Formula	C9H9NO2
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 <b>US</b> call: 001-800-227-6701 / <b>Europe</b> call: +32 14 57 52 11 Emergency Number <b>US</b> :001-201-796-7100 / <b>Europe:</b> +32 14 57 52 99 <b>CHEMTREC</b> Tel. No. <b>US</b> :001-800-424-9300 / <b>Europe:</b> 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 or Low melting solid	Colorless	No information available
irritation. Harmful if inhaled. May cause aller	•	

# Classification of the substance or mixture

Acute Oral Toxicity	Category 4
Acute Dermal Toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4
Acute Inhalation Toxicity - Dusts and Mists	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Respiratory Sensitization	Category 1
Skin Sensitization	Category 1
Specific target organ toxicity - (single exposure)	Category 3

# Label Elements

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# 2-Methoxy-5-methylphenyl isocyanate



# Signal Word

Danger

# Hazard Statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

H302 + H312 + H332 - Harmful if swallowed, in contact with skin or if inhaled

## **Precautionary Statements**

#### Prevention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

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

P272 - Contaminated work clothing should not be allowed out of the workplace

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

P284 - In case of inadequate ventilation wear respiratory protection

#### Response

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P312 - Call a POISON CENTER or doctor if you feel unwell

P330 - Rinse mouth

P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor

P362 + P364 - Take off contaminated clothing and wash it before reuse

# Storage

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

Disposal

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

# **Physical and Chemical Hazards**

None identified.

## Health Hazards

Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. Lachrymator (substance which increases the flow of tears).

#### **Environmental hazards**

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

## **Other Hazards**

Lachrymator (substance which increases the flow of tears)

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

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
2-Methoxy-5-methylphenyl isocyanate	59741-04-7	>95

# **SECTION 4. FIRST AID MEASURES**

# 2-Methoxy-5-methylphenyl isocyanate

## Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

#### Skin Contact

Call a physician immediately. SPEEDY ACTION IS CRITICAL, GET MEDICAL AID IMMEDIATELY. If symptoms persist, call a physician.

#### Inhalation

Remove to fresh air. Artificial respiration and/or oxygen may be necessary. Consult a physician if necessary.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water.

## Most important symptoms and effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

#### Self-Protection of the First Aider

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

#### Notes to Physician

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

#### Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

## 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.

#### **Environmental Precautions**

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

# **SECTION 7. HANDLING AND STORAGE**

# 2-Methoxy-5-methylphenyl isocyanate

# Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Do not breathe mist/vapors/spray.

#### Storage

Keep containers tightly closed in a cool, well-ventilated place.

To maintain product quality. Store under an inert atmosphere. Protect from moisture. Store in freezer.

#### Specific Use(s)

Use in laboratories

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

#### Exposure Controls

#### Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

#### Personal protective equipment

Eye Protection	Goggles	(European standard - EN 166)

# Hand Protection Protective gloves

Glove material Nitrile rubber Neoprene Natural rubber PVC	Breakthrough time See manufacturers recommendations	Glove thickness -	EU standard EN 374	Glove comments (minimum requirement)
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# 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	Wear appropriate protective gloves and clothing to prevent skin exposure
Respiratory Protection	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly
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 <b>Recommended Filter type:</b> Particulates filter conforming to EN 143
Small scale/Laboratory use	Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. <b>Recommended half mask:-</b> Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice.

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#### **Environmental exposure controls** No information available.

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

Appearance Physical State	Colorless Liquid or Low melting solid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	No information available No data available No information available 25 - 26 °C / 77 - 78.8 °F No data available 240 °C / 464 °F 110 °C / 230 °F No data available Not applicable No data available	@ 760 mmHg <b>Method -</b> No information available Liquid
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available No data available 1.112 @ 25°C Not applicable No information available No information available No data available No data available No data available No information available No information available	(Air = 1.0) Liquid
Molecular Formula Molecular Weight	C9H9NO2 163.18	

# **SECTION 10. STABILITY AND REACTIVITY**

Stability	Stable under recommended storage conditions. Moisture sensitive.
Hazardous Reactions Hazardous Polymerization	None under normal processing. Hazardous polymerization does not occur.
Conditions to Avoid	Incompatible products. Excess heat. Protect from water.
Materials to avoid	Strong oxidizing agents. Strong acids. Strong bases. Water.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Nitrogen oxides (NOx).

# SECTION 11. TOXICOLOGICAL INFORMATION

**Product Information** 

(a) acute toxicity;

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

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(d) respiratory or skin sensitization; Respiratory Skin	Category 1 Category 1
	May cause sensitization by skin contact
(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;	Category 3
Results / Target organs	Respiratory system
(i) STOT-repeated exposure;	No data available
Target Organs	No information available.
(j) aspiration hazard;	No data available
Symptoms / effects,both acute and delayed	Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing
	SECTION 12. ECOLOGICAL INFORMATION
Ecotoxicity effects	SECTION 12. ECOLOGICAL INFORMATION Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
	Contains no substances known to be hazardous to the environment or that are not
Persistence and Degradability	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.
Persistence and Degradability Bioaccumulative Potential	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available
Ecotoxicity effects Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available
Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance
Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available No information available 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
Persistence and Degradability Bioaccumulative Potential Mobility in soil Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants. No information available No information available 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 This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance This product does not contain any known or suspected substance 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 is classified as hazardous. Dispose of in accordance with the European Directives

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# **SECTION 14. TRANSPORT INFORMATION**

#### Road and Rail Transport

UN-No	UN2206
Proper Shipping Name	Isocyanates, toxic, n.o.s.
Technical Shipping Name	2-Methoxy-5-methylphenyl isocyanate
Hazard Class	6.1
Packing Group	III
IMDG/IMO	
UN-No	UN2206
Proper Shipping Name	Isocyanates, toxic, n.o.s.
Technical Shipping Name	2-Methoxy-5-methylphenyl isocyanate
Hazard Class	6.1
Packing Group	III
IATA	
UN-No	UN2206
Proper Shipping Name	Isocyanates, toxic, n.o.s.
Technical Shipping Name	2-Methoxy-5-methylphenyl isocyanate
Hazard Class	6.1
Packing Group	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).

		List of dangerous	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
	Hazardous Chemicals (2015 Edition)	goods GB 12268 - 2012										
2-Methoxy-5-methylph enyl isocyanate	-	-	Х	-	-	-	-	-	-		-	-

# **National Regulations**

# **SECTION 16. OTHER INFORMATION**

Prepared By
Creation Date
Revision Date
<b>Revision Summary</b>

Health, Safety and Environmental Department 19-May-2011 27-Apr-2024 New emergency telephone response service provider.

### Training Advice

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

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Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

### Legend

<ul> <li>CAS - Chemical Abstracts Service</li> <li>EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances</li> <li>PICCS - Philippines Inventory of Chemicals and Chemical Substances</li> <li>IECSC - Chinese Inventory of Existing Chemical Substances</li> <li>KECL - Korean Existing and Evaluated Chemical Substances</li> </ul>	<ul> <li>TSCA - United States Toxic Substances Control Act Section 8(b) Inventory</li> <li>IDSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List</li> <li>ENCS - Japanese Existing and New Chemical Substances</li> <li>AICS - Australian Inventory of Chemical Substances</li> <li>NZIOC - New Zealand Inventory of Chemicals</li> </ul>
<ul> <li>WEL - Workplace Exposure Limit</li> <li>ACGIH - American Conference of Governmental Industrial Hygienists</li> <li>DNEL - Derived No Effect Level</li> <li>RPE - Respiratory Protective Equipment</li> <li>LC50 - Lethal Concentration 50%</li> <li>NOEC - No Observed Effect Concentration</li> <li>PBT - Persistent, Bioaccumulative, Toxic</li> </ul>	<ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>PNEC - Predicted No Effect Concentration</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul>
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	IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution fror 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**