# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

Page 1/7
Revision Date 01-May-2024
Version 3

ALFAAB24852

# **Benzyl** isovalerate

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

产品说明: 异戊酸苄酯

Product Description: Benzyl isovalerate

**Cat No.: B24852 CAS No** 103-38-8

Molecular Formula (CH3)2 CHCH2 CO2 CH2 (C6 H5)

**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 No information available No information available

Emergency Overview Combustible liquid.

Classification of the substance or mixture

Flammable liquids. Category 4

**Label Elements** 

None required

Signal Word Warning

Hazard Statements

H227 - Combustible liquid

**Precautionary Statements** 

Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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

Response

Page 2/7 Revision Date 01-May-2024

## Benzyl isovalerate

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

#### Storage

P403 + P235 - Store in a well-ventilated place. Keep cool

#### Disposal

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

## **Physical and Chemical Hazards**

Combustible material.

#### **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.

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

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

Component	CAS No	Weight %		
Butanoic acid, 3-methyl-, phenylmethyl ester	103-38-8	<=100		

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

#### **Eve Contact**

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

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.

#### Inhalation

Remove to fresh air. Get medical attention immediately if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

Difficulty in breathing. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

#### Self-Protection of the First Aider

No special precautions required.

#### Notes to Physician

Treat symptomatically.

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

#### **Suitable Extinguishing Media**

Water mist may be used to cool closed containers.

## Extinguishing media which must not be used for safety reasons

No information available.

## **Specific Hazards Arising from the Chemical**

Combustible material. Containers may explode when heated.

#### **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.

Page 3/7 Revision Date 01-May-2024

Benzyl isovalerate

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Remove all sources of ignition.

Refer to protective measures listed in Sections 8 and 13.

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

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Keep away from open flames, hot surfaces and sources of ignition.

#### Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame.

#### Specific Use(s)

Use in laboratories

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

## **Control Parameters**

## **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. MDHS70 General methods for sampling airborne gases and vapours

#### **Exposure Controls**

## **Engineering Measures**

None under normal use conditions. Ensure adequate ventilation, especially in confined areas. .

#### Personal protective equipment

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

Hand Protection Protective gloves

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

Page 4/7 Revision Date 01-May-2024

## Benzyl isovalerate

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

(Air = 1.0)

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**

**Appearance** 

Physical State Liquid

Odor No information available
Odor Threshold No data available

**pH** No information available

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/Range245 °C / 473 °F

Flash Point > 93 °C / > 199.4 °F Method - No information available

Evaporation Rate No data available

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Vapor Pressure No data available

Vapor Density

No data available

Specific Gravity / Density No data available

Bulk Density Not applicable Liquid

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

Partition Coefficient (n-octanol/water)

Component log Pow Butanoic acid, 3-methyl-, phenylmethyl 3.26

ester

Autoignition Temperature

Decomposition Temperature

Viscosity

No data available
No data available
No data available

**Explosive Properties** 

Oxidizing Properties No information available

explosive air/vapour mixtures possible

Molecular Formula (CH3)2 CHCH2 CO2 CH2 (C6 H5)

Molecular Weight 192.26

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

**Stability** Stable under normal conditions.

Page 5 / 7 Revision Date 01-May-2024

## Benzyl isovalerate

Hazardous Reactions None under normal processing.

Hazardous Polymerization No information available.

**Conditions to Avoid** Keep away from open flames, hot surfaces and sources of ignition.

Materials to avoid No information available.

Hazardous Decomposition Products None under normal use conditions.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Product Information**

(a) acute toxicity:

	(a) acute termenty;	noute terminity;								
Component		LD50 Oral	LD50 Dermal	LC50 Inhalation						
	Butanoic acid, 3-methyl-, phenylmethyl	LD50 > 5 g/kg (Rat)	LD50 > 5000 mg/kg (Rabbit)							
	ester									

(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 Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

delayed

#### **SECTION 12. ECOLOGICAL INFORMATION**

Ecotoxicity effects

Persistence and Degradability No information available

Page 6 / 7 Revision Date 01-May-2024

## Benzyl isovalerate

Bioaccumulative Potential No information available

Component	log Pow	Bioconcentration factor (BCF)			
Butanoic acid, 3-methyl-, phenylmethyl	3.26	No data available			
ester					

Mobility in soil No information available

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

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.

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	The Inventory of Hazardous Chemicals (2015 Edition)	goods GB	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
Butanoic acid, 3-methyl-, phenylmethyl ester	-	-	Х	Х	203-106-7	Х	Х	Х	Х	Х	Х	-

#### **National Regulations**

Page 7 / 7 Revision Date 01-May-2024

## Benzyl isovalerate

## **SECTION 16. OTHER INFORMATION**

Prepared By Health, Safety and Environmental Department

Revision Date 01-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 iical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

Substances List

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

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

TWA - Time Weighted Average

IARC - International Agency for

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

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 from Shins

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**

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# **End of Safety Data Sheet**