# Thermo Fisher SCIENTIFIC

# SAFETY DATA SHEET

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ALFAAB20980

# 2,3-Difluorobenzyl alcohol

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

产品说明: 2,3-二氟苄醇

Product Description: 2,3-Difluorobenzyl alcohol

 Cat No.:
 B20980

 CAS No
 75853-18-8

 Molecular Formula
 C7H6F2O

Supplier Avocado Research Chemicals Ltd.

(Part of Thermo Fisher Scientific)

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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 Light brown No information available

**Emergency Overview** 

Combustible liquid. Causes skin irritation. Causes serious eye irritation.

#### Classification of the substance or mixture

Flammable liquids.	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2

# **Label Elements**



Signal Word Warning

**Hazard Statements** 

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## 2,3-Difluorobenzyl alcohol

H227 - Combustible liquid

H315 - Causes skin irritation

H319 - Causes serious eye irritation

#### **Precautionary Statements**

#### Prevention

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

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

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

#### Response

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

P332 + P313 - If skin irritation occurs: Get medical advice/attention

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

P337 + P313 - If eye irritation persists: Get medical advice/attention

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

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

#### 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**

Causes skin irritation. Causes serious eye irritation.

#### **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 %		
2,3-Difluoro benzyl alcohol	75853-18-8	>95		

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

# **General Advice**

If symptoms persist, call a physician.

# **Eye Contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician if irritation persists.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

#### Inhalation

Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

# Ingestion

Clean mouth with water and drink afterwards plenty of water.

## Most important symptoms and effects

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

#### Self-Protection of the First Aider

Use personal protective equipment as required.

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## 2,3-Difluorobenzyl alcohol

#### **Notes to Physician**

Treat symptomatically.

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

#### Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. 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. Keep product and empty container away from heat and sources of ignition. Risk of ignition. 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.

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

#### **Personal Precautions**

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

#### **Environmental Precautions**

Should not be released into the environment.

# Methods for Containment and Clean Up

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material. 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. Do not get in eyes, on skin, or on 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**

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**Engineering Measures** 

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. 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	Breakthrough time	Glove thickness	EU standard	Glove comments
Nitrile rubber	See manufacturers	-	EN 374	(minimum requirement)
Neoprene	recommendations			
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.

Skin and body protection Long sleeved clothing

**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

Recommended Filter type: Organic gases and vapours filter Type A Brown conforming to

EN14387

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.

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

141

When RPE is used a face piece Fit Test should be conducted

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

**Environmental exposure controls** No information available.

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

AppearanceLight brownPhysical StateLiquid

Odor No information available

Odor Threshold No data available

pH No information available

Melting Point/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo information available

Flash Point 94 °C / 201.2 °F Method - No information available

Evaporation RateNo data availableFlammability (solid,gas)Not applicableLiquidExplosion LimitsNo data available

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Vapor Pressure No data available

Vapor Density 4.97 (Air = 1.0)

Specific Gravity / Density 1.280

Bulk DensityNot applicableLiquidWater SolubilityNo information available

Solubility No information available No information available No information available

Partition Coefficient (n-octanol/water)

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 FormulaC7H6F2OMolecular Weight144.12Refractive index1.491 - 1.493

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

**Stability** Stable under normal conditions.

**Hazardous Reactions**None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

Materials to avoid Strong oxidizing agents. Strong acids. Strong bases. Strong reducing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>). Gaseous hydrogen fluoride (HF).

# **SECTION 11. TOXICOLOGICAL INFORMATION**

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

(a) acute toxicity;

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(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; No data available

**Target Organs** No information available.

No data available (j) aspiration hazard;

delayed

Symptoms / effects, both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting

# **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 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 Waste codes should be assigned by the user based on the application for which the product

was used. Do not empty into drains.

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

**Road and Rail Transport** Not Regulated

IMDG/IMO Not regulated

<u>IAT</u>A Not regulated

**Special Precautions for User** No special precautions required

# **SECTION 15. REGULATORY INFORMATION**

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#### **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
2,3-Difluoro benzyl alcohol	-	-		Х	ı	-	ı	-	-		-	-

#### **National Regulations**

# **SECTION 16. OTHER INFORMATION**

**Prepared By** Health, Safety and Environmental Department

**Creation Date** 05-Jan-2010 **Revision Date** 27-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.

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

**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

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

IARC - International Agency for Research on Cancer

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

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

PNEC - Predicted No Effect Concentration

TWA - Time Weighted Average

LD50 - Lethal Dose 50%

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

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

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## **Disclaimer**

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**End of Safety Data Sheet**