

Australian statement of hazardous nature: Classified as hazardous according to criteria of Safe Work Australia

# Section 1 - Identification

Product Name 2-{ 2-[3,5-di(trifluoromethyl)phenyl]hydrazono} malononitrile

**CAS No** 138555-70-1

Product Code SEW04978SC

Address ThermoFisher Scientific Australia Pty Ltd

5 Caribbean Drive, Scoresby VICTORIA 3179, Australia

Emergency Tel. CHEMTREC®

03 9757 4559 or +613 9757 4559

Telephone / Fax Numbers Tel: 1300 735 292

Fax: 1800 067 639

E-mail address ANZinfo@thermofisher.com

Recommended Use Laboratory chemicals.

Uses advised against This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National

Code of Practice for Chemicals of Security Concern.

# Section 2 - Hazard(s) Identification

#### Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

## Physical hazards

No hazards identified

## **Health hazards**

Acute Oral Toxicity

Acute Dermal Toxicity

Acute Inhalation Toxicity - Dusts and Mists

Category 4

Category 4

Category 4

### **Environmental hazards**

No hazards identified

#### **Label Elements**



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Signal Word Warning

#### **Hazard Statements**

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

### **Precautionary Statements**

P270 - Do not eat, drink or smoke when using this product

P271 - Use only outdoors or in a well-ventilated area

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

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

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

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

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

P330 - Rinse mouth

P363 - Wash contaminated clothing before reuse

P403 - Store in a well-ventilated place

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

#### Other information

No information available

# Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %	
2-{ 2-[3,5-di(trifluoromethyl)phenyl]hydrazono}	138555-70-1	90-100	
malononitrile			

# Section 4 - First Aid Measures

**Inhalation** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur.

**Ingestion** Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists,

call a physician.

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

medical attention.

General Advice If symptoms persist, call a physician.

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.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

None reasonably foreseeable.

Notes to Physician Treat symptomatically.

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azono) malononitrile

# 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.

#### **Hazardous Decomposition Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Hydrogen fluoride.

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

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

## Special protective equipment and precautions for fire fighters

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

#### **Emergency procedures**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

#### **Environmental Precautions**

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

### **Methods for Containment and Clean Up**

## Clean-up methods - small spillage

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

## Clean-up methods - large spillage

Typically only supplied is small quantiites as packaged goods.

If extremely toxic or used in larger quantities ensure a spillage action plan is in place. Evacuate area. Control the source and/or contain the spill if safe and able to do so. Use temporary diking, sand bags, dry sand, earth or proprietary booms/absorbent pads if available. Obtain advice on containment, neutralisation and clean-up from local emergency responders.

# **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

# Section 7 - Handling and Storage

### **Precautions for Safe Handling**

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

# Conditions for Safe Storage, Including any Incompatibilities

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

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

# Section 8 - Exposure Controls and Personal Protection

### **Exposure limits**

The product does not contain any hazardous materials with occupational exposure limits established.

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## **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

#### **Exposure Controls**

## **Engineering Measures**

Use only under a chemical fume hood. 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 Wear safety glasses with side shields (or goggles) (Australian/New Zealand Standard

AS/NZS 1337 - Eye protectors for Industrial applications)

Hand Protection Protective gloves

Glove material Nitrile rubber Neoprene Natural rubber	Breakthrough time See manufacturers recommendations	Glove thickness -	AUS/NZ Standard AS/NZS 2161	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

Repiratory Protection Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or

other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices

Recommended Filter type: Particulates filter conforming to EN 143 (or AUS/NZ equivalent)

**Recommended half mask:** Particle filtering: EN149:2001 (or AUS/NZ equivalent)

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

### Information on basic physical and chemical properties

AppearanceBrownPhysical StateSolid

Odor No information available
Odor Threshold No data available
pH No data available

Melting Point/Range 142 - 146 °C / 287.6 - 294.8 °F Measured

Softening Point No data available Boiling Point/Range No data available

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# 2-[3,5-di(trifluoromethyl)phenyl]hydr azono) malononitrile

# **SAFETY DATA SHEET**

**Flash Point** No data available Method - No information available

Solid

Solid

Not applicable **Evaporation Rate** Solid

Flammability (solid,gas) No information available

No data available **Explosion Limits** 

No data available **Vapor Pressure Vapor Density** Not applicable

Specific Gravity / Density No data available **Bulk Density** No data available Water Solubility No information available

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

**Explosive Properties** No information available **Oxidizing Properties** No information available

Other information

Molecular Formula C11 H4 F6 N4 **Molecular Weight** 306.17

# Section 10 - Stability and Reactivity

Reactivity None known, based on information available

Stability Stable under normal conditions.

**Conditions to Avoid** Heat, flames and sparks.

None known. **Incompatible Materials** 

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen fluoride.

**Hazardous Polymerization** No information available.

# Section 11 - Toxicological Information

# Information on Toxicological Effects

#### **Product Information**

(a) acute toxicity;

Category 4 Oral **Dermal** Category 4 Inhalation Category 4

No data available (b) skin corrosion/irritation;

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

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# SAFETY DATA SHEET

(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; Not applicable

Solid

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 Bioaccumulative Potential

No information available No information available

**Mobility** 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

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure

conformity with all applicable regulations.

**Contaminated Packaging** Dispose of this container to hazardous or special waste collection point.

Other Information Chemical wastes should be disposed through a licensed commercial waste collection

service. 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

IMDG/IMO Not regulated

ADG Not regulated

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IATA Not regulated

Environmental hazards No hazards identified

**Special Precautions**No special precautions required

Additional information None known

# Section 15 - Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National Regulations Australia

See section 8 for national exposure control parameters.

## Standard for the Uniform Scheduling of Medicines and Poisons

No poison schedule number allocated.

## Australian - Illicit Drug Precursors/Reagents Substance List

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

## **Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

National pollutant inventory Not applicable

#### Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

## **International Inventories**

Legend: X - Listed. '-' - Not Listed. KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

International Regulations

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

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Basel convention on the control of transboundary movements of hazardous wastes and their dispoal Not applicable.

Component	CAS No	OECD HPV	Restriction of Hazardous Substances (RoHS)	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
2-{ 2-[3,5-di(trifluoromethyl)pheny l]hydrazono} malononitrile	138555-70-1	Not applicable	Not applicable	Not applicable	Not applicable

Authorisation/Restrictions according to EU REACH

Not applicable

# **Section 16 - Other Information**

## Legend

AICS - Australian Inventory of Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**IECSC** - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

NZS 5433:2012 - Transport of Dangerous Goods on Land

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% WEL - Workplace Exposure Limit **DNEL** - Derived No Effect Level POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

NZIoC - New Zealand Inventory of Chemicals

EINECS/ELINCS - European Inventory of Existing Commercial Chemical

Substances/EU List of Notified Chemical Substances **ENCS** - Japanese Existing and New Chemical Substances

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

CAS - Chemical Abstracts Service

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

Predicted No Effect Concentration (PNEC)

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

ADG Australian Code for the Transport of Dangerous Goods by Road

and Rail

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

LC50 - Lethal Concentration 50% ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment

NOEC - No Observed Effect Concentration

**BCF** - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

#### Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## **Training Advice**

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

**Revision Date** 21-Nov-2022 **Revision Summary** Not applicable.

This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).

## Disclaimer

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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**

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