CIMTECH® 50-F321

Safety Data Sheet

according to the Work Health and Safety (WHS) Regulations
Issue date: 10/25/2019 Revision date: 5/11/2026 Supersedes: 6/1/2021 Version: 3.0

SECTION 1: Identification

1.1. GHS Product identifier

Product form : Mixture
Product name : CIMTECH® 50-F321
Product code : A30481

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Metalworking fluid
Restrictions on use : Product for industrial use only

1.4. Details of manufacturer or importer

Manufacturer
Cimcool® Korea Inc.
255, Gongdan-ro, Onsan-Eup, Ulju-gun
Ulsan
Korea
T +82-52-239-2331

Importer / Distributor
DuBois Chemicals Australia
305 Frankston Dandenong Road
DANDENONG SOUTH VIC 3164
Australia
T +61-3-8340-3222
www.duboischemicals.com.au

Emergency telephone number
81-345209637 (CHEMTREC Australia)
Operating hours 24 hours / 24 hours, 7 days a week
Australia

1.5. Emergency phone number

Emergency number : 003-0813-2549 (CHEMTREC Korea)
Operating hours 24 hours / 24 hours, 7 days a week

Country/Area	Organisation	Emergency number
Australia	NSW Poisons Information Centre. The Children's Hospital at Westmead. Locked Bag 4001 NSW 2145.	13 11 26
	Queensland Poisons Information Centre. Queensland Children's Hospital. 501 Stanley Street QLD 4101 South Brisbane.	13 11 26
	Victorian Poisons Information Centre. Austin Hospital, Melbourne. 145 Studley Road VIC 3084 Heidelberg.	13 11 26
	Western Australian Poisons Information Centre. Sir Charles Gairdner Hospital. Hospital Avenue WA 6009 Nedlands.	13 11 26

SECTION 2: Hazard identification

2.1. Classification of the hazardous chemical

Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Skin corrosion/irritation, Category 2 H315
Serious eye damage/eye irritation, Category 2B H320

2.2. GHS Label elements, including precautionary statements

Hazard pictograms (GHS AU) :

Exclamation mark

Signal word (GHS AU) : Warning

Hazard statements (GHS AU) : H315+H320 - Causes skin and eye irritation

Precautionary statements (GHS AU) : P264 - Wash hands, forearms and face thoroughly after handling.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
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.
P337+P313 - If eye irritation persists: Get medical advice/attention.

2.3. Other hazards which do not result in classification

No additional information available

SECTION 3: Composition and information on ingredients

Name	CAS-No.	Conc. (% w/w)	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
2,2',2"-nitrilotriethanol	102-71-6	5 – 10	Not classified
Octanoic acid compd. with 2,2',2"-nitrilotris[ethanol] (1:1)	22919-56-8	1 – 5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412
Other substances (not contributing to the classification of this product)	-	85 – 94	-

SECTION 4: First aid measures

4.1. Description of necessary first-aid measures

First-aid measures general : Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Call a poison center or a doctor if you feel unwell.

Self protection of the first-aider : First-aiders should pay attention to their own protection and use the recommended personal protective equipment (see section 8).

4.2. Symptoms caused by exposure

Symptoms/effects after inhalation : None under normal conditions.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : mild eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

4.3. Medical attention and special treatment

Other medical advice or treatment : Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard : No fire hazard.
Explosion hazard : No direct explosion hazard.
General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Carbon oxides (CO, CO2). Nitrogen oxides (NOx).

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : Evacuate unnecessary personnel.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.
Emergency procedures : Ventilate spillage area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and materials for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.
Methods for cleaning up : Take up liquid spill into absorbent material.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling : Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes. Wear personal protective equipment.
Handling temperature : room temperature
Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Keep in a cool, well-ventilated place away from heat.
Storage conditions	:	Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Incompatible products	:	Strong acids. Strong bases. Strong oxidizers. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
Storage temperature	:	5 – 35 °C (recommended)
Storage area	:	Keep out of direct sunlight. Protect from freezing. Store in a well-ventilated place.
Packaging materials	:	Always store the product in a container made of the same material as the original container.

SECTION 8: Exposure controls and personal protection

8.1. Control parameters - exposure standards

2,2',2''-nitrilotriethanol (102-71-6)	
Australia - Occupational Exposure Limits	
Local name	Triethanolamine
OES TWA	5 mg/m³
Remark (AU)	Sen - Respiratory and/or Skin Sensitiser.
Regulatory reference	Workplace exposure standards for airborne contaminants (2024)

8.2. Monitoring methods

No additional information available

8.3. Engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Individual protection measures, such as personal protective equipment (PPE)

Personal protective equipment	:	Wear recommended personal protective equipment.
Hand protection	:	Protective gloves
Eye protection	:	Safety glasses
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s)

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

Physical state	:	Liquid
Appearance	:	clear.
Colour	:	colourless to slightly yellow
Odour	:	characteristic
Odour threshold	:	No data available
pH	:	8.3
pH solution	:	7.8 @5%
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point / Freezing point	:	Melting point: Not applicable Freezing point: < 0 °C estimated
Boiling point	:	> 100 °C estimated
Flash point	:	Not applicable (aqueous non combustible product)
Auto-ignition temperature	:	Not applicable

Decomposition temperature	:	Not applicable
Flammability	:	The product is not flammable
Vapour pressure	:	No data available
Relative density	:	No data available
Density	:	Relative density: 1.068
Solubility	:	Miscible with water. Water: 100 %
Partition coefficient n-octanol/water (Log Pow)	:	Not applicable
Explosive properties	:	Not explosive.
Oxidising properties	:	Not oxidising
Explosive limits	:	No data available
Minimum ignition energy	:	No data available
Fat solubility	:	No data available
Particle size	:	Not applicable
Additional information	:	The above data are typical values and do not constitute a specification.

SECTION 10: Stability and reactivity

Reactivity	:	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reactions known under normal conditions of use.
Conditions to avoid	:	None under recommended storage and handling conditions (see section 7).
Incompatible materials	:	Strong acids. Strong bases. Strong oxidizing agents. Do not add sodium nitrite or other nitrosating agents which may form cancer causing nitrosamines.
Hazardous decomposition products	:	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

2,2',2''-nitrilotriethanol (102-71-6)	
LD50 oral	8000 mg/kg
LD50 dermal rabbit	> 20000 mg/kg
LD50 dermal	2500 mg/kg

Skin corrosion/irritation	:	Causes skin irritation. pH: 8.3
Serious eye damage/irritation	:	Causes eye irritation. pH: 8.3
Respiratory or skin sensitization	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified

2,2',2''-nitrilotriethanol (102-71-6)	
NOAEL (chronic, oral, animal/male, 2 years)	63 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 451 (Carcinogenicity Studies)
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified

2,2',2''-nitrilotriethanol (102-71-6)	
NOAEL (animal/male, F0/P)	1000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study), Guideline: other:, Guideline: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)

2,2',2''-nitrilotriethanol (102-71-6)	
NOAEL (animal/female, F0/P)	300 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 416 (Two-Generation Reproduction Toxicity Study), Guideline: other:, Guideline: EPA OPPTS 870.3800 (Reproduction and Fertility Effects)

STOT-single exposure : Not classified
STOT-repeated exposure : Not classified

2,2',2''-nitrilotriethanol (102-71-6)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)

Aspiration hazard : Not classified

2,2',2''-nitrilotriethanol (102-71-6)	
Viscosity, kinematic	181.5 mm²/s (40 °C, Equivalent or similar to OECD 114)

Component	
1H-Benzotriazole (95-14-7)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

12.1. Ecotoxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified
Hazardous to the aquatic environment, long–term (chronic) : Not classified

2,2',2''-nitrilotriethanol (102-71-6)	
LC50 - Fish [1]	11800 mg/l
LC50 - Fish [2]	> 1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	1386 mg/l
ErC50 algae	169 mg/l
NOEC chronic fish	> 1 mg/l Test organisms (species): other:
NOEC chronic crustacea	16 mg/l
BCF - Fish [1]	0.4 – 3.9 l/kg (Equivalent or similar to OECD 305, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-1.59
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.06 – 1.27 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
LD50 dermal rabbit	> 20000 mg/kg

Octanoic acid compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (22919-56-8)	
EC50 - Crustacea [1]	≈ 608.88 mg/l Test organisms (species): Ceriodaphnia dubia

12.2. Persistence and degradability

CIMTECH® 50-F321	
Persistence and degradability	Not established.

2,2',2''-nitrilotriethanol (102-71-6)	
Persistence and degradability	Biodegradable in the soil, No inhibition of nitrification, Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0.02 g O_2/g substance
Chemical oxygen demand (COD)	1.5 g O_2/g substance
ThOD	2.04 g O_2/g substance

Octanoic acid compd. with 2,2',2''-nitrilotris[ethanol] (1:1) (22919-56-8)	
Persistence and degradability	Not rapidly degradable

12.3. Bioaccumulative potential

CIMTECH® 50-F321	
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not applicable

2,2',2''-nitrilotriethanol (102-71-6)	
BCF - Fish [1]	0.4 – 3.9 l/kg (Equivalent or similar to OECD 305, 6 week(s), Cyprinus carpio, Flow-through system, Fresh water, Experimental value)
Partition coefficient n-octanol/water (Log Pow)	-1.59
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.06 – 1.27 (log Koc, SRC PCKOCWIN v1.66, Calculated value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

CIMTECH® 50-F321	
Mobility in soil	Not established
Partition coefficient n-octanol/water (Log Pow)	Not applicable
Partition coefficient n-octanol/water (Log Kow)	Not applicable

2,2',2''-nitrilotriethanol (102-71-6)	
Ecology - soil	Highly mobile in soil.
Partition coefficient n-octanol/water (Log Pow)	-1.59
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	1.06 – 1.27 (log Koc, SRC PCKOCWIN v1.66, Calculated value)

12.5. Other adverse effects

Ozone : Not classified
Other adverse effects : No additional information available

CIMTECH® 50-F321	
Fluorinated greenhouse gases	False

SECTION 13: Disposal considerations

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Do not re-use empty containers.

Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

SECTION 14: Transport information

In accordance with ADG / IMDG / IATA

ADG	IMDG	IATA
14.1. UN number		
Not regulated for transport		
14.2. UN Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated

14.6. Special precautions for user

Specific storage requirement : No data available
Shock sensitivity : No data available

14.7. Additional information

Other information : No supplementary information available

Transport by road and rail
Not regulated

Transport by sea
Not regulated

Air transport
Not regulated

14.8. Hazchem or Emergency Action Code

Hazchem Code : Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations

Australian Industrial Chemicals Introduction Scheme (AICIS)
Australian Inventory of Industrial Chemicals (AICIS Inventory) status : This product is categorised as exempted and is not regulated under the Industrial Chemicals Act

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
Not applicable
Australian Pesticides and Veterinary Medicines Authority (APVMA)
Not applicable
Global Inventories:

Australian Inventory of Industrial Chemicals (AICIS)	All substances are listed
New Zealand Inventory of Chemicals (NZIoC)	All substances are listed

15.2. International agreements

No additional information available

SECTION 16: Other information

Revision date : 5/11/2026

Other information : DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Classification	
Skin Irrit. 2	H315
Eye Irrit. 2B	H320

Full text of H-statements	
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2B	Serious eye damage/eye irritation, Category 2B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H315	Causes skin irritation
H318	Causes serious eye damage
H320	Causes eye irritation
H412	Harmful to aquatic life with long lasting effects

Safety Data Sheet (SDS), Australia

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.