

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product Description:	Dicyclopropyl ketone
Cat No. :	A11580
CAS No	1121-37-5
Molecular Formula	C7 H10 O

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

Details of the supplier of the safety data sheet
Importer

Fisher Scientific Korea
 D5,D6, Incheon Airport Logistics Complex
 150, Gonghangdong-Ro 296 Beon-Gil
 Jung-Gu, Incheon
 Tel: +82-1661-9555
 Fax: +82-2-2023-0603

Supplier

Thermo Fisher Scientific Chemicals, Inc.
 30 Bond Street
 Ward Hill, MA 01835-8099

E-mail address

Chem.KR@thermofisher.com

Emergency Telephone Number

Emergency telephone: Medical: +(82) 070-7686-0086 or + 1-703-741-5970
CHEMTREC: 080 822 1374 (Local), CHEMTREC: 1-800-424-9300 or + 1-703-527-3887
Korea: 00-308-13-2549 (24 hours a day, 7 days a week)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture
Physical hazards

Flammable liquids

Category 3

Health hazards

Based on available data, the classification criteria are not met

Environmental hazards

Based on available data, the classification criteria are not met

Label Elements

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024



Signal Word

Warning

Hazard Statements

H226 - Flammable liquid and vapor

Precautionary Statements

Prevention

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

P233 - Keep container tightly closed

P240 - Ground and bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

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

Response

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

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

Storage

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

Disposal

P501 - Dispose of contents/container to industrial incineration plant

Other Hazards

This product does not contain any known or suspected endocrine disruptors

NFPA

Health
0

Flammability
2

Instability
0

Physical hazards
N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	Common Name	CAS No	Index No	Weight %
Dicyclopropyl ketone	No information available	1121-37-5	Not listed	99 - 100

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Eye Contact

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

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention. Take off contaminated clothing and shoes immediately.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Drink plenty of water. Call a physician immediately. If possible drink milk afterwards.

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024

Inhalation	Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.
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.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry chemical. Alcohol resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

Thermal decomposition can lead to release of irritating gases and vapors, Carbon monoxide (CO), Carbon dioxide (CO₂).

Advice 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

Personal Precautions, Protective Equipment and Emergency Procedures

Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and Material for Containment and Cleaning Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Sweep up and shovel into suitable containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

SAFETY DATA SHEET

Dicyclopentyl ketone

Revision Date 09-Jun-2024

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Take precautionary measures against static discharges.

Conditions for Safe Storage, Including any Incompatibilities

Flammables area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks and flame.

Specific End Uses

Use in laboratories.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Component	CAS No	Korea	ACGIH TLV	OSHA PEL
Dicyclopentyl ketone	1121-37-5	Not listed	Not listed	Not listed

Component	CAS No	European Union	The United Kingdom	Germany
Dicyclopentyl ketone	1121-37-5	Not listed	Not listed	Not listed

ACGIH - Biological Exposure Indices

Component	CAS No	ACGIH - Biological Exposure Indices
Dicyclopentyl ketone	1121-37-5	Not listed

Exposure Controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ventilation systems. Use explosion-proof electrical/ventilating/lighting equipment.

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)

Hand Protection

Protective gloves

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure

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 compatibility, 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.

Personal protective equipment

Use only those certified by the Korea Occupational Safety and Health Administration.

Respiratory Protection

No protective equipment is needed under normal use conditions

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice

SAFETY DATA SHEET

Dicyclopentyl ketone

Revision Date 09-Jun-2024

Environmental exposure controls No information available

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (Physical State, Color, etc.) Light yellow Liquid

Odor Odorless
Odor Threshold No data available
pH No information available

Melting Point/Range No data available
Softening Point No data available
Boiling Point/Range 160 - 162 °C / 320 - 323.6 °F @ 760 mmHg
Flash Point 39 °C / 102.2 °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 (Air = 1.0)
Specific Gravity / Density 0.970
Bulk Density Not applicable Liquid
Water Solubility No information available
Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component	CAS No	log Pow
Dicyclopentyl ketone	1121-37-5	No data available

Autoignition Temperature No data available
Decomposition Temperature No data available
Viscosity No data available
Explosive Properties explosive air/vapour mixtures possible
Oxidizing Properties No information available

Molecular Formula C7 H10 O
Molecular Weight 110.16

SECTION 10: STABILITY AND REACTIVITY

Reactivity None known, based on information available

Chemical Stability Stable under normal conditions.

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024

Possibility of Hazardous Reactions

Hazardous Polymerization No information available.
Hazardous Reactions No information available.

Conditions to Avoid

Incompatible products. Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials

Strong oxidizing agents. Strong bases. Oxidizing agent.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information No acute toxicity information is available for this product

Information on expected route of exposure

Inhalation Avoid breathing vapors or mists.
Ingestion May be harmful if swallowed.
Eyes Avoid contact with eyes.
Skin Prolonged skin contact may defat the skin and produce dermatitis. Avoid contact with skin.

Information on Health Hazards

(a) acute toxicity;

Oral No data available
Dermal No data available
Inhalation No data available

Component	CAS No	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dicyclopropyl ketone	1121-37-5	No data available	No data available	No data available

(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

Component	CAS No	Test method	Test species	Study result
Dicyclopropyl ketone	1121-37-5	No data available	No data available	No data available

(e) germ cell mutagenicity; No data available

Component	CAS No	Test method	Test species	Study result
Dicyclopropyl ketone	1121-37-5	No data available	No data available	No data available

(f) carcinogenicity; No data available

Component	CAS No	Test method	Test species / Duration	Study result
-----------	--------	-------------	-------------------------	--------------

ALFAAA11580

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024

Dicyclopropyl ketone	1121-37-5	No data available	No data available	No data available
----------------------	-----------	-------------------	-------------------	-------------------

There are no known carcinogenic chemicals in this product

Component	CAS No	IARC	NTP	ACGIH	OSHA	UK
Dicyclopropyl ketone	1121-37-5	Not listed	Not listed	Not listed	Not listed	Not listed

(g) reproductive toxicity; No data available

Component	CAS No	Test method	Test species / Duration	Study result
Dicyclopropyl ketone	1121-37-5	No data available	No data available	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

Other Adverse Effects

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

Component	CAS No	EU - Endocrine Disruptors Candidate List	EU - Endocrine Disruptors - Evaluated Substances	Japan - Endocrine Disruptor Information
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

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.

Component	CAS No	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Dicyclopropyl ketone	1121-37-5	No data available	No data available	No data available	No data available

Persistence and degradability No information available

Bioaccumulative potential No information available

Mobility in soil No information available

Ozone Depletion Potential

Component	CAS No	Ozone Depletion Potential
Dicyclopropyl ketone	1121-37-5	Not listed

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from Residues/Unused Products Waste is classified as hazardous. Dispose in accordance with the Wastes Control Act (폐기물관리법).

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

Other Information

Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in compliance with local regulations.

SECTION 14: TRANSPORT INFORMATION

Road and Rail Transport

UN-No UN1224
Proper Shipping Name KETONES, LIQUID, N.O.S.
Technical Shipping Name Dicyclopropyl ketone
Hazard Class 3
Packing Group III

IATA

UN-No UN1224
Proper Shipping Name KETONES, LIQUID, N.O.S.
Technical Shipping Name Dicyclopropyl ketone
Hazard Class 3
Packing Group III

IMDG/IMO

UN-No UN1224
Proper Shipping Name KETONES, LIQUID, N.O.S.
Technical Shipping Name Dicyclopropyl ketone
Hazard Class 3
Packing Group III
Marine Pollutant No hazards identified

Special Precautions for User

No special precautions required

SECTION 15: REGULATORY INFORMATION

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

Legend: X - Listed '-' - Not Listed

International Inventories

Component	CAS No	KECL	TSCA	EINECS	IECSC	DSL	NDSL	PICCS	ENCS	ISHL	AICS
Dicyclopropyl ketone	1121-37-5	-	-	214-331-5	X	-	-	-	-		-

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable	Not applicable

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

Korean National Regulations

Component	CAS No	Act on Registration and	Authorised Chemicals	Existing Substances
-----------	--------	-------------------------	----------------------	---------------------

ALFAAA11580

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024

		Evaluation of Chemical Substances (K-REACH)		Subject to Registration
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

Component	CAS No	Chemical Control Act - Toxic Chemicals	Chemical Control Act - Prohibited Chemicals	Chemical Control Act - Use Restricted Chemicals
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

Component	CAS No	Chemical Control Act - Accident Precaution Chemicals (% in mixtures)	Chemical Control Act - Accident Precaution Chemicals - Quantity limits Storage (% in mixtures)	Chemical Control Act - Accident Precaution Chemicals - Quantity limits Manufacture/Use (% in mixtures)
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

Component	CAS No	Waste Control Law	Ministry of Environment - CMR risk	Ministry of Environment - Critically Controlled Substance
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Harmful Agents Subject to Work Environment Monitoring	ISHA - Prohibited substances	ISHA - Substances requiring permission
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Substances subject to control	ISHA - Harmful Agents Requiring Health Examination	ISHA - Permissible Exposure Limits
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

Component	CAS No	ISHA - Subject to Process Safety Reports (minimum quantity)	ISHA - Threshold Limit Values (TLVs) Chemicals	ISHA - Special management materials
Dicyclopropyl ketone	1121-37-5	5000 kg	Not applicable	Not applicable

National Fire Association - Dangerous Substances Minimum quantity requiring a permit

Component	CAS No	Class 1 - Oxidising solids	Class 2 - Flammable solid	Class 3 - Spontaneously Combustible Substances and Dangerous Substances When Wet	Class 4 - Flammable liquids	Class 5 - Self-reactive substances	Class 6 - Oxidising liquids
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable	4. Group 2 Petroleum (Insoluble) 1000 L	Not applicable	Not applicable

Control Parameters

Component	CAS No	Korea	ACGIH - Biological Exposure Indices
Dicyclopropyl ketone	1121-37-5	Not listed	Not listed

US Management Information

OSHA - Occupational Safety and Health Administration

Not applicable

Component	CAS No	Specifically Regulated Chemicals	Highly Hazardous Chemicals
-----------	--------	----------------------------------	----------------------------

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024

Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable
----------------------	-----------	----------------	----------------

CERCLA Not applicable

Component	CAS No	CERCLA Extremely Hazardous Substances RQs	Hazardous Substances RQs	SARA 313 - Threshold Values %
Dicyclopropyl ketone	1121-37-5	Not applicable	Not applicable	Not applicable

GHS Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Warning.

H226 - Flammable liquid and vapor. .

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

SECTION 16: OTHER INFORMATION

Legend

CAS - Chemical Abstracts Service

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

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

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

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

POW - Partition coefficient Octanol:Water

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

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

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

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

MARPOL - International Convention for the Prevention of Pollution from 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

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.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Prepared By

Health, Safety and Environmental Department

Creation Date

15-Apr-2015

Revision Date

09-Jun-2024

Revision Number

6

Revision Summary

New emergency telephone response service provider.

SAFETY DATA SHEET

Dicyclopropyl ketone

Revision Date 09-Jun-2024

MOEL's Public Notice No. 2023-9 (Standards for Classification and Labeling of Chemical Substances and Safety Data Sheets)

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