

# SAFETY DATA SHEET

According to Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
Revision Date Feb 17, 2025

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name DIMETHYLACETAMIDE

CAS-No. 127-19-5

Product code AR1050, GC1050, GN1050, GP1050, HS1050, LC1050, HS1513,

PS1050, RP1050

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

Identified uses Chemical for analysis and production.

1.3 Details of the manufacturer of the safety data sheet

Manufacturer RCI LABSCAN LIMITED.

24 Rama 1 Road, Pathumwan, Bangkok 10330 Thailand

Telephone number (662) 613-7911-4 Fax number (662) 613-7915

1.4 Emergency Telephone Number

Emergency phone (662) 613-7911-4

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312

Eye irritation (Category 2), H319

Reproductive toxicity (Category 1B), H360D

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 Label elements

# Labelling according Regulation (EC) No 1272/2008

#### Pictogram





Signal word

Danger

Hazard statement(s)

H312 + H332 Harmful in contact with skin or if inhaled

H319 Causes serious eye irritation. H360D May damage the unborn child.

Precautionary statement(s)

P203 Obtain, read and follow all safety instructions before use.

P261 Avoid breathing fume/gas/mist/vapours/spray.

P264 + P265 Wash hands thoroughly after handling. Do not touch eyes.

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

P302 + P352 IF ON SKIN: Wash with plenty water.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

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P318 IF exposed or concerned: Get medical advice.

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

2.3 Other hazards None

## **SECTION 3: Composition/information on ingredients**

## 3.1 Substances

Synonyms Acetic acid dimethylamide, N, N-Dimethylacetamide, Dimethylacetone amide,

Dimethylamide acetate

CAS-No EC-No EC-Index-No Formula Molecular Weight Weight % 127-19-5 204-826-4 616-011-00-4 CH<sub>3</sub>CON(CH<sub>3</sub>)<sub>2</sub> 87.12 g/mol <=100

## Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Concentration	Classification
Dimethylacetamide		
CAS-No 127-19-5	<=100%	Acute toxicity, Inhalation (Category 4), H332
EC-No 204-826-4		Acute toxicity, Dermal (Category 4), H312
EC-Index-No 616-011-00-4		Eye irritation (Category 2), H319
		Reproductive toxicity (Category 1B), H360D

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Inhalation Move to fresh air in case of accidental inhalation of vapors. Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus. Skin contact Remove contaminated clothing and wash affected skin with soap and water. If signs of poisoning appear, treat as for inhalation. Obtain medical attention. Wash contaminated clothing before reuse. Contaminated combustible material, e.g. clothing ignites more readily and burns fiercely. Eve contact If the substance has got into the eyes, immediately wash out with plenty of water at least 15 minutes. Obtain medical attention. Ingestion Rinse mouth. Do not induce vomiting. Immediately make victim drink water (two glasses at the most) Keep patient warm. In case of shortness of breath, give oxygen. Apply artificial respiration only if patient is not breathing or under medical supervision. No artificial aspiration mouth to mouth or mouth to nose. Use suitable instruments/apparatus.

# 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2.2 and section 11

## 4.3 Indication of any immediate medical attention and special treatment needed

After swallowing, caution if victim vomits, make a victim drink plenty of water. Subsequently administer; Sodium sulfate 1 tablespoon/250 ml of water. Obtain medical attention.

Obtain medical attention. Never give anything by mouth to an unconscious person.

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# **SECTION 5: Firefighting measures**

## 5.1 Extinguishing media

## Suitable extinguishing media

Extinguish with carbon dioxide, dry chemical, foam or water. In the event of fire, cool tanks with water spray.

## 5.2 Special hazards arising from the substance or mixture

Vapors may form explosive mixture with air at ambient temperature. Flash back possible over considerable distance.

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

#### 5.4 Further information

Standard procedure for chemical fires. Prevent firefighting water from entering surface water or groundwater.

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Do not breathe vapors or spray mist. Wear a positive-pressure supplied-air respirator, flame retardant antistatic protective clothing. Shut off leaks if without risk. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Contain or absorb leaking liquid with sand or earth, consults an expert. Prevent liquid entering sewers, basements and workpits. If substance has entered a water course or sewer or contaminated soil, advise police.

## 6.3 Methods and materials for containment and cleaning up

Spillage: May react with combustible substances creating fire or explosion hazard and formation of toxic fumes. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Soak up with inert absorbent material (e.g. sand, silica gel or chemical absorbent pads). Prevent liquid entering sewers, basements and workpits; vapor may create explosive atmosphere. Transfer to covered steel drums. Dispose of promptly.

#### 6.4 Reference to other sections

For disposal see Section 13.

# **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

Keep container tightly closed. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use only in area provided with appropriate exhaust ventilation. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing. Do not empty into drains.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Keep out of direct sunlight and away from incompatible materials. Store in original container. Electrical equipment should be protected to the appropriate standard.

**Storage class 6.1C (TRGS 510)**; Combustible substances of acute toxicity, category 3/hazardous substances that are toxic or produce chronic effects.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

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# **SECTION 8: Exposure controls/personal protection**

## 8.1 Control parameters

# **Derived No Effect Level (DNEL)**

Application Area	Health Effects	Exposure	Value
Worker	Long-term Systemic effects	Inhalation	36 mg/m <sup>3</sup>

Worker Long-term Systemic effects Skin contact 13.6 mg/kg Body weight

## **Predicted No Effect Concentration (PNEC)**

Compartment	Value	
Aquatic intermittent release	5 mg/l	
Fresh water	0.5 mg/l	
Fresh water sediment	2.27 mg/kg	
Marine water	0.0966 mg/l	
Sewage treatment plant	485 mg/l	
Soil	0.15 mg/kg	

## 8.2 Exposure controls

#### Appropriate engineering controls

The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Ventilation hoods and fans required when working with organic solvents or in hot melt applications.

# Individual protection measures (Personal protective equipment, PPE) Eye/face protection

Goggles giving complete protection to eyes.

## Skin protection

Chemical resistant apron / flame retardant antistatic protective clothing, heavy duty work shoes.

Handle with gloves

- Full contact wears gloves from butyl rubber material.
- Splash contact wears gloves from nitrile rubber material.

The select protective gloves have to satisfy the specifications of EU Directive 89/686 EEC and standard EN 374 derived from it.

## Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Required when vapor/aerosols are generated filter A-(P2) (EN 141 or EN 14387).

## **Environmental exposure controls**

Prevent liquid entering sewers, basements and workpits.

# **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical State Liquid

Color Colorless to yellow Odour Amine like
Odour Threshold Not Available pH 4 at 200 g/l, at 20°C

Melting point/range -20 °C

Boiling point/range

Flash point

Flash point

Evaporation rate

Flammability (solid, gas)

Explosion limits: lower

upper

166 °C at 1013 hPa

70 °C (closed cup)

Not Available

Not Available

1.7 % (V)

11.5 % (V)

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Vapor Pressure 1.76 hPa at 20°C

Relative Vapor Density 3.01

Density 0.940 g/ml at 20°C
Water solubility Soluble at 20°C
Partition coefficient (n-octanol/water) log Pow: -0.77
Auto-Ignition temperature 400 °C
Decomposition Temperature Not Available
Viscosity 1.02 mPa.s at 20°C

Oxidizing properties The substance or mixture is not classified as oxidizing.

Not Explosive

# **SECTION 10: Stability and reactivity**

## 10.1 Reactivity

Not Available

Explosive properties

## 10.2 Chemical stability

Stable under recommended storage conditions.

## 10.3 Possibility of hazardous reactions

The substance can react dangerously with strong oxidizing agents, hexachloro cyclohexane, carbon tetrachloride.

#### 10.4 Conditions to avoid

Strong heating.

#### 10.5 Incompatible materials

Strong oxidizing agents, halogenated hydrocarbons, nitrates.

Unsuitable working materials: Various plastic.

## 10.6 Hazardous decomposition products

Nitrogen oxides, carbon monoxide, carbon dioxide (Hazardous decomposition products from under fire condition).

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

# **Acute toxicity**

LC<sub>50</sub> (inhalation, rat): 897 mg/l/1h LD<sub>50</sub> (oral, rat): 4300 mg/kg LD<sub>50</sub> (dermal, rabbit): 2240 mg/kg

## Skin corrosion/irritation

No skin irritations.

## Serious eye damage/eye irritation

Slight irritations.

# Respiratory or skin sensitization

Not Available

# Germ cell mutagenicity

Bacterial mutagenicity; Ames test is negative.

# Carcinogenicity

Not Available

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#### Reproductive toxicity

May cause harm to the unborn child.

# Specific target organ toxicity (STOT) - single exposure

Not Available.

## Specific target organ toxicity (STOT) - repeated exposure

Not Available

#### **Aspiration hazard**

Not Available

#### **Further information**

After absorption of toxic quantities: Inebriation, damage of liver and kidneys. The product should be handled with the care usual when dealing with chemicals.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish LC<sub>50</sub> L. idus: >500 mg/l/96h.

Toxicity to daphnia EC<sub>50</sub> Daphnia magna: >500 mg/l/48h.

and other aquatic invertebrates

Toxicity to algae  $IC_{50}$  Desmodesmus subspicatus: >500 mg/l/72h Toxicity to bacteria  $EC_{10}$  Activated sludge: >1995 mg/l/30 min.

## 12.2 Persistence and degradability

Biodegradability >90 % /28d. MITI test, biodegradable.

#### 12.3 Bioaccumulative potential

Partition coefficient (n-octanol/water) log Pow: -0.77 (experimental).

No bioaccumulation is to be expected (log P o/w <1)

## 12.4 Mobility in soil

Not Available

## 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Do not allow to enter waters, waste water or soil.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding law and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste or burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations.

#### Contaminated packaging

Disposal in compliance with official regulations. Handle contaminated packaging as hazardous waste in the same way of the substance itself. If not officially specified differently, non-contaminated packaging may be

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treated like household waste or recycled.

# **SECTION 14: Transport information**

Not subject to transport regulations.

# **SECTION 15: Regulatory information**

This safety datasheet complies with the requirements of Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

# **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**Not Available

# 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

## **SECTION 16: Other information**

#### Recommended restrictions

Take notice of labels and safety data sheets for the working. Chemicals Take necessary action to avoid static electricity discharge.

#### Reference

Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Labelling according to EC Directives 67/548 EEC and Regulation (EC) No 1272/2008.

Transportation information according to Recommendations on the Transport of Dangerous Goods, Model Regulations. Twelfth revised edition. United Nations.

Institute for Occupational Safety and Health of the German Social Accident Insurance in Sankt Augustin/Germany, Source: IFA for Databases on hazardous substances (GESTIS).

## **Further information**

Contact to RCI Labscan Limited.

#### **Revision Date**

17/02/2025

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 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.

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