

## CAS No: 107-12-0 MSDS

### MATERIAL SAFETY DATA SHEET (MSDS)

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

##### 1.1. Product identifier

Product form : Substance  
:  
CAS No : 107-12-0  
Product code : 5472D  
Synonyms : Ethyl cyanide

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

###### 1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

###### 1.2.2. Uses advised against

No additional information available

##### 1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries  
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,  
Ludhiana Pb. (141007)  
+91 9316777775, +91 7707855700  
[sales@labogens.com](mailto:sales@labogens.com) - [www.Labogens.com](http://www.Labogens.com)

##### 1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Flammable liquids, H225  
Category 2  
Acute toxicity (dermal), H310  
Category 1  
Acute toxicity (oral), H301  
Category 3  
Acute toxicity (inhal.), H332  
Category 4  
Serious eye damage/eye irritation, Category 2 H319

Full text of classification categories and H statements : see section 16

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### Classification according to Directive 67/548/EEC or 1999/45/EC

F; R11  
T+; R27  
T; R25  
Xn; R20  
Xi; R36

Full text of R-phrases: see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP)

: Danger

Hazard statements (CLP)

: H225 - Highly flammable liquid and vapour  
H301 - Toxic if swallowed  
H310 - Fatal in contact with skin  
H319 - Causes serious eye irritation  
H332 - Harmful if inhaled

Precautionary statements (CLP)

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking  
P264 - Wash ... thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician  
P302+P352 - IF ON SKIN: Wash with plenty of soap and 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

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Name : PROPIONITRILE FOR SYNTHESIS  
CAS No : 107-12-0

Full text of R- and H-phrases: see section 16

### 3.2. Mixture

Not applicable

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### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- |                                       |   |
|---------------------------------------|---|
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.   |
| First-aid measures after skin contact | : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Immediately call a POISON CENTER or doctor/physician. Specific measures (see ... on this label). Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. |
| 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    | : Rinse mouth. Obtain emergency medical attention. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see ... on this label).  |

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

- |                                      |  |
|--------------------------------------|--|
| Symptoms/injuries after skin contact | : Fatal in contact with skin.  |
| Symptoms/injuries after eye contact  | : Causes serious eye irritation.   |
| Symptoms/injuries after ingestion    | : Toxic if swallowed. Swallowing a small quantity of this material will result in serious health hazard. |

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- |                                |   |
|--------------------------------|---|
| Suitable extinguishing media   | : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO <sub>2</sub> ). |
| Unsuitable extinguishing media | : Do not use a heavy water stream.  |

#### 5.2. Special hazards arising from the substance or mixture

- |                  |  |
|------------------|--|
| Fire hazard      | : Highly flammable liquid and vapour.              |
| Explosion hazard | : May form flammable/explosive vapour-air mixture. |

#### 5.3. Advice for firefighters

No additional information available

### SECTION 6: Accidental release measures

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

- |                  |  |
|------------------|--|
| General measures | : Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking. |
|------------------|--|

##### 6.1.1. For non-emergency personnel

- |                      |                                   |
|----------------------|-----------------------------------|
| Emergency procedures | : Evacuate unnecessary personnel. |
|----------------------|-----------------------------------|

##### 6.1.2. For emergency responders

- |                      |  |
|----------------------|--|
| Protective equipment | : Use personal protective equipment as required. |
| Emergency procedures | : Ventilate area.                                |

#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

- |                         |  |
|-------------------------|--|
| Methods for cleaning up | : Collect spillage. On land, sweep or shovel into suitable containers. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. |
|-------------------------|--|

#### 6.4. Reference to other sections

No additional information available

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Additional hazards when processed	: Handle empty containers with care because residual vapours are flammable.
Precautions for safe handling	: No naked lights. No smoking. Use only non-sparking tools. Do not get in eyes, on skin, or on clothing.
Hygiene measures	: Do not eat, drink or smoke when using this product. Wash ... thoroughly after handling.

#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/... equipment.
Storage conditions	: Keep in fireproof place. Keep container tightly closed.
Incompatible materials	: Heat sources.

#### 7.3. Specific end use(s)

No additional information available

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

Hand protection	: protective gloves
Eye protection	: Chemical goggles or safety glasses
Skin and body protection	: Wear suitable protective clothing
Respiratory protection	: Wear appropriate mask

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Molecular mass	: 55.08 g/mol
Colour	: Clear Colorless.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -93 °C
Freezing point	: No data available
Boiling point	: 97 °C
Flash point	: 6 °C

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Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: Flammable Highly flammable liquid and vapour
Vapour pressure	: 39 mm Hg at 20 °C
Relative vapour density at 20 °C	: 1.9
Relative density	: No data available
Density	: 0.782 g/cm <sup>3</sup>
Solubility	: Water: Moderate
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No additional information available

### 10.2. Chemical stability

Highly flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

### 10.3. Possibility of hazardous reactions

No additional information available

### 10.4. Conditions to avoid

Open flame. Direct sunlight.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

May release flammable gases.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Dermal: Fatal in contact with skin. Oral: Toxic if swallowed. Inhalation: Harmful if inhaled.

Skin corrosion/irritation : Not classified

Serious eye damage/irritation : Causes serious eye irritation.

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Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified

Specific target organ toxicity (repeated exposure)	: Not classified
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Aspiration hazard	: Not classified
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Potential adverse human health effects and symptoms	: Toxic if swallowed. Fatal in contact with skin.
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### SECTION 12: Ecological information

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

No additional information available

#### 12.3. Bioaccumulative potential

No additional information available

#### 12.4. Mobility in soil

No additional information available

#### 12.5. Results of PBT and vPvB assessment

No additional information available

#### 12.6. Other adverse effects

No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose of contents/container to ...
Additional information	: Handle empty containers with care because residual vapours are flammable.
Ecology - waste materials	: Hazardous waste due to toxicity.

### SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

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### 14.1. UN number

UN-No. (ADR)	: 2404
UN-No. (IMDG)	: 2404
UN-No.(IATA)	: 2404
UN-No.(ADN)	: 2404
UN-No. (RID)	: 2404

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: PROPIONITRILE
Proper Shipping Name (IMDG)	: PROPIONITRILE
Proper Shipping Name (IATA)	: PROPIONITRILE
Proper Shipping Name (ADN)	: PROPIONITRILE
Proper Shipping Name (RID)	: PROPIONITRILE
Transport document description (ADR)	: UN 2404 PROPIONITRILE, 3 (6.1), II, (D/E)
Transport document description (IMDG)	: UN 2404 PROPIONITRILE, 3 (6.1), II (2°C c.c.)
Transport document description (IATA)	: UN 2404 PROPIONITRILE, 3 (6.1), II
Transport document description (ADN)	: UN 2404 PROPIONITRILE, 3 (6.1), II
Transport document description (RID)	: UN 2404 PROPIONITRILE, 3 (6.1), II

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)	: 3 (6.1)
Danger labels (ADR)	: 3, 6.1



#### IMDG

Transport hazard class(es) (IMDG)	: 3 (6.1)
Danger labels (IMDG)	: 3, 6.1



#### IATA

Transport hazard class(es) (IATA)	: 3 (6.1)
Hazard labels (IATA)	: 3, 6.1



#### ADN

Transport hazard class(es) (ADN)	: 3 (6.1)
Danger labels (ADN)	: 3, 6.1

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### RID

Transport hazard class(es) (RID) : 3 (6.1)

Danger labels (RID) : 3, 6.1



### 14.4. Packing group

Packing group (ADR) : II

Packing group (IMDG) : II

Packing group (IATA) : II

Packing group (ADN) : II

Packing group (RID) : II

### 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

Other information : No supplementary information available

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : FT1

Limited quantities (ADR) : 1L

Excepted quantities (ADR) : E0

Packing instructions (ADR) : P001, IBC02

Mixed packing provisions (ADR) : MP19

Portable tank and bulk container instructions (ADR) : T7

Portable tank and bulk container special provisions (ADR) : TP1

Tank code (ADR) : L4BH

Tank special provisions (ADR) : TU15

Vehicle for tank carriage : FL

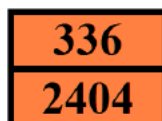
Transport category (ADR) : 2

Special provisions for carriage - Loading, unloading and handling (ADR) : CV13, CV28

Special provisions for carriage - Operation (ADR) : S2, S19

Hazard identification number (Kemler No.) : 336

Orange plates :



Tunnel restriction code (ADR) : D/E

EAC code : •2WE

APP code : A(fl)



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### - Transport by sea

Limited quantities (IMDG)	: 1 L
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P001
IBC packing instructions (IMDG)	: IBC02
Tank instructions (IMDG)	: T7
Tank special provisions (IMDG)	: TP1, TP13
EmS-No. (Fire)	: F-E
EmS-No. (Spillage)	: S-D
Stowage category (IMDG)	: E
Stowage and handling (IMDG)	: SW2
Flash point (IMDG)	: 2°C c.c.
MFAG-No	: 131

### - Air transport

PCA Excepted quantities (IATA)	: E0
PCA Limited quantities (IATA)	: Forbidden
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA packing instructions (IATA)	: Forbidden
PCA max net quantity (IATA)	: Forbidden
CAO packing instructions (IATA)	: 364
CAO max net quantity (IATA)	: 60L
Special provision (IATA)	: A1
ERG code (IATA)	: 3P

### - Inland waterway transport

Classification code (ADN)	: FT1
Special provisions (ADN)	: 802
Limited quantities (ADN)	: 1 L
Excepted quantities (ADN)	: E0
Carriage permitted (ADN)	: T
Equipment required (ADN)	: PP, EP, EX, TOX, A
Ventilation (ADN)	: VE01, VE02
Number of blue cones/lights (ADN)	: 2

### - Rail transport

Classification code (RID)	: FT1
Limited quantities (RID)	: 1L
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P001, IBC02
Mixed packing provisions (RID)	: MP19
Portable tank and bulk container instructions (RID)	: T7
Portable tank and bulk container special provisions (RID)	: TP1
Tank codes for RID tanks (RID)	: L4BH
Special provisions for RID tanks (RID)	: TU15
Transport category (RID)	: 2
Special provisions for carriage – Loading and unloading (RID)	: CW13, CW28
Colis express (express parcels) (RID)	: CE7
Hazard identification number (RID)	: 336

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### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

PROPIONITRILE FOR SYNTHESIS is not on the REACH Candidate List

PROPIONITRILE FOR SYNTHESIS is not on the REACH Annex XIV List

#### 15.1.2. National regulations

##### Germany

AwSV/VwVwS Annex reference : Water hazard class (WGK) 1, slightly hazardous to water (Classification according to VwVwS, Annex 2; WGK No 1596)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

##### Denmark

Class for fire hazard : Class I-1

Store unit : 1 liter

Classification remarks : F <Flam. Liq. 2>; Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product  
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

Full text of R-, H- and EUH-phrases:

Acute Tox. 1 (Dermal)	Acute toxicity (dermal), Category 1
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
H225	Highly flammable liquid and vapour
H301	Toxic if swallowed

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H310	Fatal in contact with skin
H319	Causes serious eye irritation
H332	Harmful if inhaled
R11	Highly flammable
R20	Harmful by inhalation
R25	Toxic if swallowed
R27	Very toxic in contact with skin
R36	Irritating to eyes
F	Highly flammable
T	Toxic
T+	Very toxic
Xi	Irritant
Xn	Harmful

*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*