

DETONATING FUSE (MACORD I DETONATING CORD)

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 7/7/2018

Revision date: 2/13/2016

Version: 1.0

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

1.1. Product identifier

Product name : Detonating Fuse (Macord I Detonating Cord)

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

Use of the substance/mixture : Industrial use, professional use

Restrictions on use : No data available

1.3. Details of the supplier of the safety data sheet

SUA EXPLOSIVES AND ACCESSORIES PVT LTD.

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Tel: +91-7155-67019/90/93/94

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admin@suaexplosives.in

1.4. Emergency telephone number

Emergency number : +91-80-4120782

National poison center (UZEM) : +90 114

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Explosives, Division 1.1

H201

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

Explosive; mass explosion hazard.

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS01

Signal word (CLP) : Danger

Hazard statements (CLP) : H201 - Explosive; mass explosion hazard.

Precautionary statements (CLP) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P230 - Keep wetted with appropriate material.
P234 - Keep only in original packaging.
P240 - Ground and bond container and receiving equipment.
P250 - Do not subject to grinding/shock/friction.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P370+P372+P380+P373 - In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.
P401 - Store in accordance with local regulations on explosives.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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Name	Product identifier	%	Classification (CLP)
Pentaerythritol tetranitrate; pentaerythrite tetranitrate; P.E.T.N.	(CAS-No.) 78-11-5 (EC-No.) 201-084-3 (EC Index-No.) 603-035-00-5	34 - 58	Unst. Expl, H200

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : No first aid measure is required under normal conditions.
- First-aid measures after skin contact : No first aid measure is required under normal conditions.
- First-aid measures after eye contact : Rinse eyes with water as a precaution. 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. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

- Symptoms/effects : Overexposure to this material may result in methemoglobinemia.

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 : Water spray. Dry powder. Foam.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Explosion risk in case of fire.
- Hazardous decomposition products in case of fire; : Toxic fumes may be released. Carbon monoxide. Carbon dioxide. Nitrogen oxides.

5.3. Advice for firefighters

- Firefighting instructions : Do not fight fire when fire reaches explosives. Evacuate area.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : Wear recommended personal protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
- Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Eliminate all ignition sources if safe to do so. Evacuate personnel to a safe area.

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.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Mechanically recover the product. Eliminate all ignition sources if safe to do so. Notify authorities if product enters sewers or public waters.
- Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Ensure good ventilation of the work station. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Do not subject to grinding, shock, friction. Wear personal protective equipment.
- Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Ground/bond container and receiving equipment.
Storage conditions	: Keep container tightly closed and dry. Keep in a cool, well-ventilated place away from incompatible materials. Risk of explosion by shock, friction, fire or other sources of ignition.
Heat and ignition sources	: Keep away from open flames, hot surfaces and sources of ignition.

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

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

Protective gloves. Standard EN 374 - Protective gloves against chemicals.

Eye protection:

Safety glasses with side shields. Standard EN 166 - Personal eye-protection.

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid. Flexible cord with a powder core.
Colour	: Various colored.
Odour	: Odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate	: No data available
Melting point	: 138.5 - 141 °C (PETN)
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability	: Non flammable.
Vapour pressure	: No data available
Relative vapour density	: No data available
Relative density	: Not applicable
Solubility	: Insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: Explosive; mass explosion hazard.
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

Explosive; mass explosion hazard.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

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

Regional legislation (waste) : Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
0065	0065	0065	0065	0065

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ADR	IMDG	IATA	ADN	RID
14.2. UN proper shipping name				
CORD, DETONATING	CORD, DETONATING	Cord, detonating,	CORD, DETONATING	CORD, DETONATING
Transport document description				
UN 0065 CORD, DETONATING, 1.1D, (B1000C)	UN 0065 CORD, DETONATING, 1.1D	UN 0065 Cord, detonating,, 1.1D	UN 0065 CORD, DETONATING, 1.1D (1.1D)	UN 0065 CORD, DETONATING, 1.1D (1.1D)
14.3. Transport hazard class(es)				
1.1D	1.1D	1.1D	1.1D	1.1D
				
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : 1.1D
Limited quantities (ADR) : 0
Excepted quantities (ADR) : E0
Packing instructions (ADR) : P139
Special packing provisions (ADR) : PP71, PP72
Mixed packing provisions (ADR) : MP21
Transport category (ADR) : 1
Special provisions for carriage - Packages (ADR) : V2
Special provisions for carriage - Loading, unloading and handling (ADR) : CV1, CV2, CV3
Special provisions for carriage - Operation (ADR) : S1
Tunnel restriction code (ADR) : B1000C

- Transport by sea

Limited quantities (IMDG) : 0
Excepted quantities (IMDG) : E0
Packing instructions (IMDG) : P139
Special packing provisions (IMDG) : PP71, PP72
EmS-No. (Fire) : F-B
EmS-No. (Spillage) : S-X
Stowage category (IMDG) : 04
Stowage and handling (IMDG) : SW1
Properties and observations (IMDG) : See glossary of terms in appendix B.

- Air transport

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) : Forbidden
CAO max net quantity (IATA) : Forbidden
Special provisions (IATA) : A2
ERG code (IATA) : 1L

- Inland waterway transport

Classification code (ADN) : 1.1D
Limited quantities (ADN) : 0

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Excepted quantities (ADN)	: E0
Equipment required (ADN)	: PP
Provisions prior to loading (ADN)	: LO01
Provisions for handling and stowage of the cargo (ADN)	: HA01, HA02, HA03
Number of blue cones/lights (ADN)	: 3

- Rail transport

Classification code (RID)	: 1.1D
Limited quantities (RID)	: 0
Excepted quantities (RID)	: E0
Packing instructions (RID)	: P139
Special packing provisions (RID)	: PP71, PP72
Mixed packing provisions (RID)	: MP21
Transport category (RID)	: 1
Special provisions for carriage – Packages (RID)	: W2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW1
Hazard identification number (RID)	: 1.1D

14.7. Transport in bulk according to Annex II of Marpol 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

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) nwg, Non-hazardous to water (Classification according to AwSV, Annex 1)

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

Netherlands

SZW-lijst van kankerverwekkende stoffen : None of the components are listed

SZW-lijst van mutagene stoffen : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : None of the components are listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : None of the components are listed

Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent Bioaccumulative Toxic

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REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Full text of H- and EUH-statements:

Expl. 1.1	Explosives, Division 1.1
Unst. Expl	Explosives, Unstable explosives
H200	Unstable explosives.
H201	Explosive; mass explosion hazard.

Disclaimer of Liability

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