

# Safety Data Sheet



**This document conforms to**

**Regulation (EC) No 1907/2006 (REACH) Annexure II**

**The products described herein are fireworks in UN Dangerous Goods, Class 1 and should be handled or used after the regulations concerning possession and use have been carefully studied and fully understood for this Class.**

	Compiled by	Approved by
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## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

<b>Product Name:</b>	<b>Pyrotechnic Cord / Fuse</b>
<b>Other name(s):</b>	Visco Fuse / Micro Cord / Cannon Fuse / Hobby Fuse / Micro Cord / Igniter Cord
<b>Recommended Use of the Chemical and Restrictions on Use</b>	Delay Time Fuse for Igniting Pyrotechnics
<b>Manufacturer:</b>	<b>Commercial Explosives (India) Pvt. Ltd.</b>
<b>CIN No.:</b>	U99999MH1967PTC013831
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<b>Email address and Website</b>	<b>contact@safetyfuse.in, www.safetyfuse.in</b>

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations.

**Human and environmental-specific hazards:**  
Substances and goods that present a risk of Fire

**Classification of the substance or mixture:**  
Explosives - Division 1.4G

**SIGNAL WORD:** WARNING



**PICTOGRAMS :**

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## Hazard Statement(s):

H204: fire or projection hazard

## Precautionary Statement(s):

P234 Keep only in original packaging.  
P370+P372+P380+P373 In case of fire: Explosion risk. Evacuate area. DO NOT fight fire when fire reaches explosives.  
P370+P380+P375 In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.  
P501 Dispose of contents / container in accordance with national regulations.  
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P250 Do not subject to grinding / shock / friction.  
P280 Wear protective gloves / protective clothing / eye protection / face protection.  
P240 Ground and bond container and receiving equipment.  
P372 Explosion risk.  
P373 DO NOT fight fire when fire reaches explosives.  
P401 Store in accordance with local regulations.

Contains: POTASSIUM NITRATE

## Disposal:

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**Poisons Schedule (SUSMP):** None allocated.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion
Potassium Nitrate	007757-79-01	44% +/-5%
Sulphur	007704-34-9	6% +/-5%
Wood Carbon / Charcoal	016291-96-6	9% +/-5%
Nitrocellulose	9004-70-0	10% +/-5%
Dextrin Yellow	9004-53-9	Approx. 0.1 %
Blended Fiber, Poly-Propylene, Pigment, (non-hazardous components)	-	31% +/-5%

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

**EYES:** Rinse cautiously with water for several minutes. In all cases of eye contamination, it is a sensible precaution to seek medical advice.

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SKIN: Wash skin thoroughly with soap and water. If skin irritation occurs: Get medical advice/attention.

INHALATION: In the case of inhalation of combustion fumes: Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

INGESTION: Rinse mouth with water. Drink plenty of water. Try to induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Treat symptomatically. Confined exposure to combustion fumes may result in dizziness, difficulty in breathing, extreme eye irritation, vomiting and unconsciousness. May cause burns - treat symptomatically. Patients should therefore be kept under medical observation for at least 48 hours. Emergency medical procedure for carbon monoxide (CO) and/or nitrous oxide (NO<sub>x</sub>) poisoning.

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

Information not available

## 5. FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

#### SUITABLE EXTINGUISHING EQUIPMENT

Flooding quantities of water. If water is not available: Carbon dioxide (CO<sub>2</sub>) / Dry chemicals / Extinguishing powder

#### UNSUITABLE EXTINGUISHING EQUIPMENT

Information not available.

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

Fire and explosion hazards Explosive.

Hazardous combustion products Fire creates: Carbon monoxide (CO). Nitrogen oxides (NO<sub>x</sub>).

### 5.3. Advice for firefighters

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Firefighting procedures; Remove fuse from danger zone if possible. Immediately evacuate at least a 300-meter radius around the fire. Stay upwind as toxic gases may develop during fire.

Other Information: Approach only when it is certain that the fire is extinguished.

The disposal and destruction of safety fuse that has been exposed to fire must be left to experts.

Normal firefighting clothing i.e., fire kit, gloves and boots in combination with self-contained open circuit positive pressure compressed air breathing apparatus.

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## 6. ACCIDENTAL RELEASE MEASURES

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

Personal protection measures; Remove all sources of ignition and spark. Prevent friction and mechanical impacts. Do not smoke, use open fire or other sources of ignition. Avoid contact with skin and eyes. Prevent inhalation of fumes developed by deflagration of black powder.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

Secure damage area. Protect the material from rain and spilling. Do not discharge into drains, water courses or onto the ground.

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect spilled explosive mass with suitable non-sparking tools (made of wood or aluminum). Place into marked, sealable containers. The material should be disposed by experts and as required by the authorities. Wear personal protective equipment.

Evaluate the compatibility of the container to be used, by checking section 10. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 & 13

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Handle with care. Do not smoke or use open fire, or other sources of ignition. Remove all sources of ignition, high temperatures, friction and mechanical shock. Never use a 'scissor-type' cutting device. Only a sharp knife should be used to cut fuse. Wash hands before breaks and before smoking, eating or drinking.

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

Stored only in premises/buildings approved by the authorities. Store in a dry place with temperatures between -20°C and +25°C. Relative humidity should be between 30 % and 75 %. Keep away any sources of ignition and high temperatures. No smoking. Use only non-sparking tools. Keep the storage locked at all times and protected from unlawful entry. Never open shipping containers inside a storage room. Avoid rough handling. Keep the storage area and its surroundings clean and free of flammable material. Strictly adhere to national legal requirements.

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## 7.3. Specific end use(s)

Recommendations : Obtain special instructions before use.

Specific use(s) : See Section 1

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Contains no substances with threshold limit value.

### 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

Hygiene / Environmental : Wash hands always after work, before eating, drinking, smoking or going to the bathroom. When using do not eat, drink or smoke.

#### HAND PROTECTION

In the case of prolonged contact with the product, protect the hands with penetration-resistant work gloves

Work glove material must be chosen according to the use process and the products that may form. Latex gloves may cause sensitivity reactions.

#### SKIN PROTECTION

Use anti-static clothes appropriate for the given type of work. Material: Cotton.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

#### EYE PROTECTION

Wear airtight protective goggles

#### RESPIRATORY PROTECTION

Respiratory protection not required.

#### ENVIRONMENTAL EXPOSURE CONTROLS

Avoid the product from entering drains, sewers, waterways and soil.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance	Wire / Cord like
Colour	Variable
Odour	Odourless
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	290-350 °C
Evaporation rate	Not available

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Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	Not available
Solubility soluble in water	(KNO <sub>3</sub> ) Concentration:316 g/100 g H <sub>2</sub> O Temperature:20°C
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Explosive
Oxidising properties	Not available

## 9.2. Other information

Information not available

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

### 10.2. Chemical stability

The product is stable in normal conditions of use and storage.

### 10.3. Possibility of hazardous reactions

Explosive material. A major fire may involve a risk of explosion. Combustion may result due to friction, fire and other sources of ignition.

### 10.4. Conditions to avoid

Mechanical shocks, friction, open flame, all sources of heat and sparks due to the risk of deflagration

### 10.5. Incompatible materials

Initiators, flammable substances, strong oxidants, reducing agents.

### 10.6. Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Hydrogen sulphur (H<sub>2</sub>S).

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Metabolism, toxicokinetics, mechanism of action and other information

Information not available

#### Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

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Information not available

## Interactive effects

Information not available

## ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

POTASSIUM NITRATE                      LD50 (Oral) 3750 mg/kg Rat

## SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class  
Slightly irritating to the eyes.

## SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

## RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

## GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

## CARCINOGENICITY

Does not meet the classification criteria for this hazard class

## REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

## STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

## STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

## ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

## OTHER EFFECTS

Delayed effects: Ingestion: (KNO<sub>3</sub>) Mucosal irritation, nausea, vomiting and diarrhea. After absorption of large quantities: methaemoglobinaemia with headache, cardiac arrhythmia, drop in blood pressure, dyspnea and spasms, key symptom; cyanosis (blue colouration of the blood).



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## 12. ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

### 12.1. Toxicity

POTASSIUM NITRATE LC50 - for Fish 1378 mg/l/96h Preticulata EC50 - for Crustacea 490 mg/l/48h Daphnia magna

### 12.2. Persistence and degradability

POTASSIUM NITRATE Solubility in water > 10000 mg/l  
Degradability: information not available

### 12.3. Bioaccumulative potential

Information not available

### 12.4. Mobility in soil

Information not available

### 12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage more than 0,1%.

### 12.6. Other adverse effects

The following applies to nitrates in general: May contribute to eutrophication of water supplies. Additional ecological information; Sulphur, charcoal and potassium nitrate are ecologically inert.

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

Do not allow runoff to sewer, waterway or ground. Leave disposal of unused, expired or deteriorated safety fuse to experts. This material should be disposed according local and national laws and regulations. Uncleaned empty containers are to be handled in the same way as the ones containing products.

## 14. TRANSPORT INFORMATION

### 14.1. UN number ADR / RID, IMDG, IATA:

0336, 0066

### 14.2. UN proper shipping name

ADR / RID, IMDG, IATA: FIREWORKS, CORD IGNITER

### 14.3. Transport hazard class(es) & Label

ADR / RID, IMDG, IATA: 1.4G



### 14.4. Packing group

ADR / RID, IMDG, IATA: -

### 14.5. Environmental hazards

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ADR / RID: NO IMDG: NO IATA: NO

## 14.6. Special precautions for user

Classified as "Dangerous Goods" (IATA & IMDG)

Packing Instruction (IATA): 135 or 140

Special Provision (IATA): A802

ERG Code (IATA): 1L

Limited Quantities (IATA) :

Passenger Aircraft - Forbidden

Cargo Aircraft - 75 Kgs. per Package

IMDG EMS Fire: F-B

IMDG EMS Spill: S-X

IMDG Stowage & Segregation : Category 06

Quantity Restrictions : None

## 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant

## 15. REGULATORY INFORMATION

Please refer to local legislature for relevant regulatory classification, licencing, storage, usage, transportation and disposal instructions, and any other information.

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

Restrictions relating to the product or contained substances pursuant to Annex XVII to TR Regulation 2017/30105

None

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage more than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

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## 15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## 16. OTHER INFORMATION

The information contained herein is furnished on the basis of relevant construction at the time of compilation and our own knowledge. Constituents may change from time to time depending on the new data and products and sources becoming available. The information provided is for guidance purpose only and does not replace a trained authorized person who should direct and supervise the handling, storage, use and destruction of this product and the relevant regulations applicable. The users of this information should correlate this information as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information to ensure the correct and legal procedures in handling, storage, use and destruction of the product and the occupational hazards related with the usage of the product.

The manufacturer / exporter, importer and its employees, owners, directors, shareholders, author accept no legal liability for consequential damages of any nature whatsoever which may arise due to correct or incorrect handling, use, storage, transportation or destruction of the product.

### LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- PBT: Persistent bioaccumulative and toxic as REACH Regulation