

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

## MATERIAL SAFETY DATA SHEET (MSDS)

### PHOSPHOURS RED (FOR SYNTHESIS)

#### 1. Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

Trade name : PHOSPHOURS RED (FOR SYNTHESIS)

Product code : P0160200100

Identification of the product : Red phosphorus  
 CAS No: 7723-14-0  
 EC No :231-768-7  
 Annex No :015-002-00-7

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

Use : Industrial. For professional use only.

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

Company identification SUVCHEM  
 Chaitanya Tower, 2nd Floor, Office # 206,  
 Siddharth Nagar, S.V. Road,  
 Goregaon (West), Mumbai - 400062,  
 Maharashtra, India.  
 Contact: +91 22 28725393 / 94 / 95  
 Email ID: info@suvchem.com/care@suvchem.com

##### 1.4. Emergency telephone number

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

#### 2. Hazards identification -DSD

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

##### Classification EC 67/548 or EC 1999/45

Classification : F; R11  
 R16  
 R52-53

##### Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)

Physical hazards : Flammable solids - Category 1 - Danger (CLP : Flam. Sol. 1) H228

Environmental hazards : Hazardous to the aquatic environment - Chronic hazard - Category 3 (CLP : Aquatic Chronic 3) H412

##### 2.2. Label elements

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PHOSPHOURS RED (FOR SYNTHESIS)**
**2. Hazards identification -DSD (continued)**
**Labelling EC 67/548 or EC 1999/45**
**Symbol(s)**

**Symbol(s)**

: F : Highly flammable

**R Phrase(s)**

: R11 : Highly flammable.

R16 : Explosive when mixed with oxidizing substances.

R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S Phrase(s)**

: S2 : Keep out of the reach of children.

S7 : Keep container tightly closed.

S43 : In case of fire, use .

S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

**Contains**

: Red phosphorus

**Labelling Regulation EC 1272/2008 (CLP)**
**Hazard pictograms**

**Signal words**

: Danger

**Hazard statements**

: H228 : Flammable solid.

H412 : Harmful to aquatic life with long lasting effects.

**Precautionary statements**
**• General**

: P102: Keep out of reach of children.

P103: Read label before use.

P101: If medical advice is needed, have product container or label at hand.

**• Prevention**

: P240: Ground/bond container and receiving equipment.

P241: Use explosion-proof electrical, ventilating, lighting, ..., equipment.

P210: Keep away from heat, sparks, open flames or hot surfaces. - No smoking.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P273: Avoid release to the environment.

**• Response**

: P370+P378: In case of fire: Use for extinction.

**• Disposal considerations**

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Contains**

: Red phosphorus

**2.3. Other hazards**

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## MATERIAL SAFETY DATA SHEET (MSDS)

### PHOSPHOURS RED (FOR SYNTHESIS)

#### 2. Hazards identification -DSD (continued)

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : Red phosphorus

EC No :231-768-7  
 Annex No :015-002-00-7  
 Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Red phosphorus	100 %	7723-14-0	231-768-7	015-002-00-7	----	F; R11 R16 R52-53  Flam. Sol. 1 _ H228 Aquatic Chronic 3 _ H412

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

##### 4.1. Description of first aid measures

**Inhalation** : Assure fresh air breathing. Allow the victim to rest.  
**Skin contact** : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.  
**Eye contact** : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.  
**Ingestion** : Obtain emergency medical attention. Do NOT induce vomiting. Rinse mouth.

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

**Symptoms relating to use** : Not expected to present a significant hazard under anticipated conditions of normal use.  
 Not expected to present a significant hazard under anticipated conditions of normal use.

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

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PHOSPHOURS RED (FOR SYNTHESIS)**
**5. Fire-fighting measures (continued)**

- Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.  
**Unsuitable extinguishing media** : Do not use a heavy water stream.  
**Surrounding fires** : Use water spray or fog for cooling exposed containers.

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

- Flammable class** : Flammable solid.  
**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

**5.3. Advice for fire-fighters**

- Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.  
**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**6. Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**

- For emergency responders** : Equip cleanup crew with proper protection.  
 Ventilate area.  
**Technical measures** : Use special care to avoid static electric charges.  
**Special precautions** : Remove ignition sources. No naked lights. No smoking.  
**For non-emergency personnel** : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

- Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.  
 Avoid release to the environment.

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

- Clean up methods** : On land, sweep or shovel into suitable containers. Minimize generation of dust.  
 Store away from other materials.

**6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PHOSPHOURS RED (FOR SYNTHESIS)**
**7. Handling and storage**
**7.1. Precautions for safe handling**

<b>Handling</b>	: Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Handle empty containers with care because residual vapours are flammable.
<b>Technical protective measures</b>	: Provide good ventilation in process area to prevent formation of vapour. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting, ..., equipment.
<b>Special precautions</b>	: No naked lights. No smoking.

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

<b>Storage</b>	: Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use. Keep in fireproof place. Ground/bond container and receiving equipment.
<b>Storage - away from</b>	: Strong bases. Strong acids. Sources of ignition. Direct sunlight. Heat sources.

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

<b>Specific end use(s)</b>	: None.
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**8. Exposure controls/personal protection**
**8.1. Exposure controls**

<b>Personal protection</b>	: Avoid all unnecessary exposure.
• <b>Respiratory protection</b>	: Wear approved mask.
• <b>Hand protection</b>	: Wear protective gloves.
• <b>Eye protection</b>	: Chemical goggles or safety glasses.
• <b>Others</b>	: When using, do not eat, drink or smoke.

**8.2. Control parameters**

<b>Occupational Exposure Limits</b>	: No data available.
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**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

<b>Physical state at 20 °C</b>	: Solid.
<b>Colour</b>	: Red powder

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PHOSPHOURS RED (FOR SYNTHESIS)**
**9. Physical and chemical properties (continued)**

Odour	: N/A
Odour threshold	: No data available.
pH value	: Not applicable.
Melting point [°C]	: 280 °C
Decomposition point [°C]	: N/A
Critical temperature [°C]	: N/A
Auto-ignition temperature [°C]	: 2600C
Flammability (solid, gas)	: N/A Flammable solid.
Flash point [°C]	: N/A
Boiling point [°C]	: N/A
Initial boiling point [°C]	: N/A
Final boiling point [°C]	: N/A
Evaporation rate	: N/A
Vapour pressure [20°C]	: 0.04 hPa at 20 °C
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm3]	: 2,34
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: Insoluble in water
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: N/A
Viscosity at 40°C [mm2/s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity	: Not established.
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**10.2. Chemical stability**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**PHOSPHOURS RED (FOR SYNTHESIS)**
**10. Stability and reactivity (continued)**

**Chemical stability** : Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

**Hazardous reactions** : Not established.

**10.4. Conditions to avoid**

**Conditions to avoid** : Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

**10.5. Incompatible materials**

**Materials to avoid** : Strong acids. Strong bases.

**10.6. Hazardous decomposition products**

**Hazardous decomposition products** : Fumes. Carbon monoxide. Carbon dioxide.  
May release flammable gases.

**11. Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

- **Inhalation** : Based on available data, the classification criteria are not met.
- **Dermal** : Based on available data, the classification criteria are not met.
- **Ingestion** : Based on available data, the classification criteria are not met.

**Corrosion** : Based on available data, the classification criteria are not met.

**Irritation** : Based on available data, the classification criteria are not met.

**Sensitization** : Based on available data, the classification criteria are not met.

**Mutagenicity** : Based on available data, the classification criteria are not met.

**Carcinogenicity** : Based on available data, the classification criteria are not met.

**Toxic for reproduction** : Based on available data, the classification criteria are not met.

**STOT-single exposure** : Based on available data, the classification criteria are not met.

**STOT-repeated exposure** : Based on available data, the classification criteria are not met.

**Aspiration hazard** : Based on available data, the classification criteria are not met.

**12. Ecological information**
**12.1. Toxicity.**



**MATERIAL SAFETY DATA SHEET (MSDS)**
**PHOSPHOURS RED (FOR SYNTHESIS)**
**12. Ecological information (continued)**

**Toxicity information** : Harmful to aquatic life with long lasting effects.

**12.2. Persistence - degradability**

**Persistence - degradability** : May cause long-term adverse effects in the environment.

**12.3. Bioaccumulative potential**

**Bioaccumulative potential** : Not established.

**12.4. Mobility in soil**

**Mobility in soil** : Not established.

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

**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**

**Environmental precautions** : Avoid release to the environment.

**13. Disposal considerations**
**13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Special precautions** : Handle empty containers with care because residual vapours are flammable.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

**Proper shipping name** : PHOSPHORUS, AMORPHOUS  
**UN N°** : 1338  
**H.I. nr** : 40  
**ADR - Class** : 4.1  
**Labelling - Transport** : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.



**MATERIAL SAFETY DATA SHEET (MSDS)**
**PHOSPHOURS RED (FOR SYNTHESIS)**
**14. Transport information (continued)**


ADR - Classification code : F3  
 ADR - Group : III  
 ADR - Packing instructions : P410 R001  
 ADR - Limited Quantity : 5 KG  
 ADR - Tunnel code : E : Passage forbidden through tunnels of category E.


**14.2. Sea transport (IMDG) [English only]**

Proper shipping name : PHOSPHORUS, AMORPHOUS  
 UN N° : 1338  
 IMO-IMDG - Class or division : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.  
 IMO-IMDG - Packing group : III  
 IMO-IMDG - Packing instructions : P410  
 IMO-IMDG - Limited quantities : 5 kg  
 IMO-IMDG - Marine pollution : No  
 EMS-Nr : F-A S-G

**14.3. Air transport (ICAO-IATA) [English only]**

Proper shipping name : PHOSPHORUS, AMORPHOUS  
 UN N° : 1338  
 IATA - Class or division : 4.1 : Flammable solids, self-reactive substances and desensitized explosives.  
 IATA - Packing group : III  
 IATA - Passenger and Cargo Aircraft : ALLOWED  
   - Passenger and Cargo - Packing instruction : 446  
   - Passenger and Cargo - Maximum Quantity/Packing : 25 kg  
 IATA - Cargo only : ALLOWED  
   - Cargo only - Packing instruction : 449  
   - Cargo only - Maximum Quantity/Packing : 100 kg  
 IATA - Limited Quantities : 10 kg

## MATERIAL SAFETY DATA SHEET (MSDS)

### PHOSPHOURS RED (FOR SYNTHESIS)

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

#### DISCLAIMER:

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- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
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