

DeCarb52M

(Calcium Carbide Based DS Reagent)

1. General Information :

Company Name : DESMET REAGENT PVT. LTD.
Address : 2/5 Sarat Bose Road, 9th Floor ,9B, Kolkata – 700020
Manufacturing Unit : Plot No. 36, Zone C, B.I.G.C. Rasmada, Durg, Chattisgarh 491001
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2. Composition :

Chemical Characterization : Calcium Carbide (ground)

Hazardous Components :

| CAS number | UN No. | Designation | Content | Unit | Key | R-sets |
|-------------|--------|-----------------|---------|------|-----|--------|
| 000075-20-7 | 1402 | Calcium Carbide | max. 54 | % | F | 15 |

3. Potential Hazards :

Reacts with water and forms highly inflammable gases.
The substance is highly caustic to eyes and mucous membranes and irritating to the skin.

4. First Aid Measures :

General Instructions :

Remove soiled clothing and wash prior to reusing.
Consult a doctor in case of indisposition.

Upon Inhaling :

Go out into the fresh air. If discomfort continues, consult a doctor.

Upon Coming Into Contact With The Skin :

Rinse immediately with plenty of water. If discomfort continues, consult a doctor.

Upon Coming Into Contact With The Eyes :

Rinse carefully with plenty of water, including under the eyelids. Visit a doctor immediately.

Upon Swallowing:

Drink plenty of water. Consult a doctor immediately. The doctor will decide whether to induce vomiting.

Instructions For Attending Physician :

The product hydrolyzes when it comes into contact with aqueous fluids; formation of inflammable gases and calcium hydroxide (highly alkaline).

5. Fire-Fighting Measures :

Suitable Extinguishing Substances : Dry Sand, Dry Salt, TEC

Unsuitable Extinguishing Substances For Safety Reasons : Foam, Water

Special Protective Fire-Fighting Equipment : In case of hazardous smoke, wear gas mask.
Adapt Extinguishing substance to surrounding fire.

6. Measures for Accidental Release :

Precautions For Person :

Provide adequate ventilation. Avoid dust formation. Wear protective clothing.

Environmental Protection Measures :

Prevent from reaching the surface water or sewage system.

Procedure For Cleaning/Absorption :

Absorb mechanically and dispose in suitable containers. Protect from humidity and water.
Keep away from sources of ignition. Do not smoke.

7. Handling and Storage :

HANDLING :

Insure adequate ventilation in places where dust formation is possible. Observe general precautions for handling chemicals.

INSTRUCTIONS FOR FIRE AND EXPLOSION PROTECTION :

Protect from humidity and water. Avoid dust formation. Keep away from sources of ignition. Do not smoke.

STORAGE :

Store in tightly sealed containers at a cool and ventilated location. Cover with dry inert gas.
Do not store together with acids, bases, oxidation agents or water.

Suitable material for container : Steel

8. Other Information, Handling and Storage :

Constituents With Maximum Exposure Limit :

| CAS NO. | Designation Of Substance | Type | Value | Unit |
|-------------|--------------------------|------|-------|--------------------|
| 001305-78-8 | Calcium oxide | MAC | 5.0 | mg*m ⁻³ |
| 007803-51-2 | Phosphine | MAC | 0.15 | mg*m ⁻³ |

General Safety Precautions :

Do not eat, drink or smoke when using. Shower after finishing work.

Respirator :

In case of dust formation wear gas mask.

Hand Protection :

Wear impermeable gloves.

Eye Protection :

Wear protective glasses with side shield. Keep eye-wash bottle with clean water nearby.

Body Protection :

Wear long-sleeved jacket. Wash soiled clothing immediately.

9. Physical and Chemical Properties :Form : Powder COLOR : Grey-Black odour : As per PH₃

Melting point : Approx. 1800°C

Flammability : Reacts with water by forming Highly flammable gases.

Ignition Point : Unknown

Spontaneous Ignition : Not spontaneously inflammable

Explosion Hazard : Dust and air can form an explosive mixture

Explosion Limits : Lower explosion limit : 2.3 % acetylene by volume;
Upper explosion limit : 82 % acetylene by volumeDensity : Approx. 2000 kg*m⁻³Bulk Density : Approx. 900 kg*m⁻³Solubility In Water : Decomposition to CaO and C₂H₂

pH-VALUE (as aqueous solution) : Alkaline

10. Stability and Reactivity :

Substances To be Avoided : Humidity, water, acids, bases and oxidation agents.
Develops flammable gases.

Hazardous Decomposition Products : Acetylene, Calcium Hydroxide, Phosphine

11. Toxicology :

Highly irritants and harmful for eyes and respiratory tract. Irritates the skin.

12. Ecology :

After reaction, toxic effect on fish. Formation of Ca(OH)_2 .

20 mg/l harmful to fish.

70 mg/l lethal for fish after 26 min.

13. Disposal :

Store for later disposal as solid waste. Ensure that the storage container is clearly labeled with both the identity of the solid and with the statement that it reacts with water to produce an inflammable gas.

14. Additional Information :

Chemical Name : Calcium Carbide, Calcium Oxide, Carbon, Calcium Fluoride

Chemical Identity : CaC_2 , CaO , C , CaF_2

Trade Name and Synonyms : Calcium Carbide, DeCarb52M

Product Use : Hot Metal DeSulphurisation

This information describes the product's safety requirements only and is based on our Current knowledge.

It does not represent a guarantee for the properties of the described product under the statutory warranty regulations.

Compliance with the applicable laws and regulations shall be the responsibility of the consignee of our product.