

# DI HYDROXYACETONE

## Material Safety Data Sheet (MSDS)

### 1. PRODUCT IDENTIFICATION

Product Name: dihydroxyacetone  
 INCI Name: dihydroxy-2-propanone, dihyxal  
 Synonyms: 1,3-dihydroxyacetone  
 CAS Number: 96-26-4  
 EINECS Number: 202-494-5  
 Origin: synthetic

Eye Contact: May cause irritation. Irrigate eye with water for at least 15 to 20 minutes. Seek medical attention if symptoms persist.  
 Skin Contact: May cause irritation; skin can become transiently discolored to red or brown.  
 Ingestion: No specific hazard known

### 2. PHYSICAL & CHEMICAL PROPERTIES

Melting Point: 68 - 71°C (154 - 160°F)  
 Boiling Point: not applicable  
 Vapor Pressure: not applicable  
 Vapor Density: not applicable  
 Evaporation Rate: not applicable  
 Density: not determined  
 Solubility in water: soluble  
 pH Value: 4 - 6 (5% water)  
 Appearance & Odor: off- white crystalline powder, faint odor

### 8. FIRST AID MEASURES

Eyes: Irrigate eyes with a heavy stream of water for at least 15 to 20 minutes. If irritation persists get medical attention.  
 Skin: Wash exposed areas of the body with soap and water.  
 Inhalation: Remove from area of exposure. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist.  
 Ingestion: If gastrointestinal symptoms develop, consult medical personnel.

### 3. STABILITY & REACTIVITY

Chemical Stability: may lose activity when stored at > 6°C (43°F)  
 Incompatibility: none known  
 Hazardous Decomposition Products: none known  
 Hazardous Polymerisation: will not occur

### 9. FIRE FIGHTING MEASURES

Flammability Limits: None known  
 Unusual Fire Hazard: None known  
 Fire Fighting Procedures: Firefighters should wear full fire-fighting turn-out gear (full Bunker gear) including NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

### 4. HANDLING & STORAGE

Avoid contact with eyes and skin. Wash thoroughly after handling. As with all chemicals, good industrial hygiene practices should be followed when handling this material. Avoid freezing or excessive heat. Do not handle or store near an open flame, heat or other sources of ignition. Keep the container tightly closed and in a cool, well-ventilated place.

### 10. TOXICOLOGICAL INFORMATION

Acute Toxicity: LD50 16 g/kg (oral, rats)  
 Skin Tests: Dihydroxyacetone was tolerated well by rabbits in acute skin and mucous membrane tolerance tests. Dihydroxyacetone reacts with the horny layer of the skin and does not penetrate into deeper skin layer.  
 Carcinogenicity, Mutagenicity: not data available

### 5. ACCIDENTAL RELEASE MEASURES

Isolate spill area immediately. Keep unauthorized personnel away. Ventilate closed spaces before entering. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, basements or confined areas. Surface may become slippery after spillage. Use vacuum or broom sweeping and remove to disposal container. If damp, flush with water.

### 11. DISPOSAL CONSIDERATIONS

Storage and disposal must be in accordance with applicable local, state & federal disposal regulations. Characterization and compliance with applicable laws are the responsibility solely of the generator.

### 6. EXPOSURE CONTROLS & PERSONAL PROTECTION

Respiratory Protection: Avoid to breath dust. Use NIOSH/OSHA-approved respiratory protective equipment.  
 Protective Clothing: Gloves recommended to prevent skin contact. Safety glasses, goggles, or face shield recommended for eye protection.  
 Other Protective Measures: Employees must practice good personal hygiene, washing exposed areas of skin several times daily and laundering contaminated clothing before re-use.

### 12. TRANSPORT INFORMATION

DOT Shipping Name: Refer to corresponding hazard class  
 ADR/ RIC Code: Refer to corresponding hazard class  
 Sea Transport IMDG Code: Refer to corresponding hazard class  
 Air Transport IATA: Refer to corresponding hazard class

### 7. HAZARDS IDENTIFICATION

General: Relatively non hazardous and non combustible.  
 Inhalation: Avoid to breath dust. May cause irritation to the respiratory tract.

### 13. DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitability & completeness of such information for his own particular use.

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