

SAFETY DATA SHEET  
**Q-Matrix Hydra**

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**SECTION 1: IDENTIFICATION**

Product identifier used on the label

Q- Matrix Hydra

Recommended use of the chemical and restriction on use

Recommended use\*: Absorbent

Suitable for use in industrial sector: chemical industry

\* The "Recommended use" identified for this product is provided solely to comply with a US Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

CEM Corporation  
3100 Smith Farm Road  
Matthews, NC 28104

Telephone: 704-821-7015

Fax: 704-821-7894

Other means of identification

Chemical family: polyacrylic acid, sodium salt, crosslinked

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**SECTION 2: HAZARD(S) IDENTIFICATION**

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

**Classification of the Product**

Combustible Dust, Combustible Dust (1)

Label elements

Signal word:

Warning

Hazard statement(s):

May form combustible dust concentration in air.

**Hazards not otherwise classified**

No specific dangers known, if the regulations/notes for storage and handling are considered.

**According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

**Emergency Overview**

CAUTION:

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

INGESTION MAY CAUSE GASTRIC DISTURBANCES.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

This product does not contain any components classified as hazardous under the referenced regulation.

**According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

**CAS Number:**

Trade Secret

**Content (W/W):**

>= 95.0 %

**Chemical name:**

Proprietary acrylic polymer

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**SECTION 4: FIRST-AID MEASURES**

**Description of first aid measures**

General advice: Remove contaminated clothing.

If inhaled: Keep patient calm, remove to fresh air, seek medical attention. Assist in breathing if necessary.

If on skin: Wash thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes: Wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical attention.

If swallowed: Immediately rinse mouth and then drink plenty of water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

**Most important symptoms and effects, both acute and delayed**

Symptoms: No significant symptoms are expected due to the non-classification of the product.

**Indication of any immediate medical attention and special treatment needed**

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote

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## **SECTION 5: FIRE-FIGHTING MEASURES**

### **Extinguishing media**

Suitable extinguishing media: water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons: carbon dioxide, water jet

Additional information: Avoid whirling up the material/product because of the danger of dust explosion.

### **Special hazards arising from the substance or mixture**

Hazards during fire-fighting: Burning produces harmful and toxic fumes.

### **Advice for fire-fighters**

Protective equipment for fire-fighting: Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

### **Further information:**

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

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## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### Further accidental release measures

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

### **Personal precautions, protective equipment and emergency procedures**

Breathing protection required. Avoid dust formation.

### **Environmental precautions**

Do not discharge into drains/surface waters/groundwater.

### **Methods and material for containment and cleaning up**

Nonsparking tools should be used.

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## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for safe handling**

Handle in accordance with good industrial hygiene and safety practice.

Breathing must be protected when large quantities are decanted without local exhaust ventilation. Avoid the formation and deposition of dust.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

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

Further information on storage conditions: Keep container dry because product takes up the humidity of air.

Keep container tightly closed and dry; store in a cool place.

The packed product is not damaged by low temperatures or by frost.

The packed product will not be damaged by high temperatures.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Advice on system design:**

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

**Respiratory protection:**

Breathing protection if dusts are formed.

**Hand protection:**

Chemical resistant protective gloves

**Eye protection:**

Tightly fitting safety goggles (chemical goggles).

**General safety and hygiene measures:**

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

Form: granules



Odour: odourless  
Colour: white  
pH value: approx. 6.0  
Glass transition temperature: approx. 140 °C (approx. 101.3 hPa) The substance / product decomposes. The product has not been tested.  
Bulk density: approx. 700 kg/m<sup>3</sup>  
Thermal decomposition: No decomposition if used as directed.  
Solubility in water: insoluble, only capable of swelling

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## **SECTION 10: STABILITY AND REACTIVITY**

### **Reactivity**

Corrosion to metals:  
No corrosive effect on metal.

Minimum ignition energy:

The product is capable of dust explosion.

### **Chemical stability**

The product is stable if stored and handled as prescribed/indicated.

### **Possibility of hazardous reactions**

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

The product is stable if stored and handled as prescribed/indicated.

### **Conditions to avoid**

Avoid humidity.

### **Incompatible materials**

water

### **Hazardous decomposition products**

Decomposition products:

Hazardous decomposition products: carbon monoxide, carbon dioxide, hydrocarbons

Thermal decomposition: No decomposition if used as directed.

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## SECTION 11: TOXICOLOGICAL INFORMATION

### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

### Acute Toxicity/Effects

#### Acute toxicity:

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

#### Oral:

Type of value: LD50  
Species: rat  
Value: > 2,000 mg/kg

#### Dermal

Type of value: LD50  
Species: rat  
Value: > 2,000 mg/kg

#### Irritation / corrosion

Assessment of irritating effects: Ingestion may cause irritation of the gastrointestinal tract. Contact with powders or dusts may irritate the eyes, skin and respiratory tract.

#### Skin

Species: rabbit  
Result: non-irritant  
Method: OECD Guideline 404

#### Eye

Species: rabbit  
Result: non-irritant  
Method: OECD Guideline 405

#### Sensitization

No sensitizing effect.

### Chronic Toxicity/Effects

#### Carcinogenicity

Information on: Superabsorber sodium salt

Assessment of carcinogenicity: A chronic (2-year) lifetime inhalation study in rats with respirable superabsorber polymer dust (micronized to < 10 µm diameter) resulted in a non-specific inflammatory response in the lungs followed by tumor development in some rats in the highest chronic exposure level of 0.8 mg/m<sup>3</sup>. In the absence of chronic inflammation, tumours are not expected.

#### Other Information

The statement was derived from products of similar composition.

### **Symptoms of Exposure**

No significant symptoms are expected due to the non-classification of the product.

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## **SECTION 12: ECOLOGICAL INFORMATION (NON-MANDATORY)**

### **Toxicity**

#### Toxicity to fish

LC50 (96 h) > 100 mg/l, Brachydanio rerio (OECD Guideline 203, static)

#### Aquatic invertebrates

EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

#### Aquatic plants

EC50 (72 h) > 100 mg/l, Desmodosmus subspicatus (OECD Guideline 201)  
Nominal concentration.

#### Soil living organisms

Toxicity to soil dwelling organisms:  
LC50 > 1,000 mg/kg, Eisenia foetida (OECD Guideline 207)

### **Microorganisms/Effect on activated sludge**

#### Toxicity to microorganisms

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

### **Persistence and degradability**

#### Assessment biodegradation and elimination (H2O):

The product is not very soluble in water and can thus be removed from water mechanically in suitable effluent treatment plants.

### **Mobility in soil**

#### Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface. Adsorption to solid soil phase is not expected.

### **Additional information**

The product contains: <= 20 (W/W) PPM total amount of heavy metal as Pb

Add. remarks environm. fate & pathway:

Due to the consistency of the product, dispersion into the environment is impossible. Therefore no negative effects on the environment may be anticipated based on the present state of knowledge.

Other ecotoxicological advice:

Do not release untreated into natural waters. The ecotoxic effect of the product has not been tested. The information on this was derived from products of similar structure or composition.

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### **SECTION 13: DISPOSAL CONSIDERATIONS (NON-MANDATORY)**

#### **Waste disposal of substance**

Dispose of in accordance with local authority regulations. Incinerate in a licensed facility. Do not incinerate closed containers. Do not discharge into drains/surface waters/groundwater.

#### **Container disposal**

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

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### **SECTION 14: TRANSPORT INFORMATION (NON-MANDATORY)**

#### **Land transport**

USDOT: Not classified as a dangerous good under transport regulations

#### **Sea transport**

IMDG: Not classified as a dangerous good under transport regulations

#### **Air transport**

IATA/ICAO: Not classified as a dangerous good under transport regulations

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### **SECTION 15: REGULATORY INFORMATION (NON-MANDATORY)**

#### **Federal Regulations**

#### **Registration status:**

Chemical TSCA, US released / listed

#### **EPCRA 311/312 (Hazard categories)**

Fire (Combustible Dust);

#### **NFPA Hazard codes**

Health : 1 Fire: 1 Reactivity: 0 Special:

#### **HMIS III rating**

Health: 1 Flammability: 1 Physical hazard:0





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**SECTION 16: OTHER INFORMATION**

This information is presented in good faith and believed to be accurate as of the date shown. This information is furnished without warranty of any kind. Employers should use this information only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use of these materials and the safety and health of employees.

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