

MATERIAL SAFETY DATA SHEET

CARBOMER 940 (DRY POLYMER)

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1. SUBSTANCE AND COMPANY IDENTIFICATION

1.1 Identification of the product:

CARBOMER 940

2. COMPOSITION / INFORMATION ON INGREDIENTS

2.1 Chemical Composition

Polyacrylic Acid H.S. CODE: 3906909000 CAS NO.: 9003-01-4

INCI Name: Carbomer

Ingredients	Content
Acrylic Polymer	98-100%

3. HAZARDS IDENTIFICATION

3.1 Acute Health Effects

Solid particles on the eye (powder/dust) may cause pain. Dust inhalation may cause coughing, mucous production.

3.2 Chronic Health Effects

Contact dermatitis may occur in individuals under extreme condition of prolonged and repeated contact.

3.3 Routs Of Exposure/Entry

Eyes, Skin contact, inhalation, ingestion.

3.4 Target Organs

Respiratory System, Skin.

3.5 Medical Conditions Aggravated by Exposure

Pre-existing respiratory disease(s) & skin problems may be aggravated by prolonged or repeated inhalation of airborne dust.

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4. FIRST AID MEASURES

- 4.1 Skin Contact : Wash the affected area thoroughly with plenty of water and soap.
- 4.2 Eye Contact : Flush eyes with plenty of one percent (1%) physiological saline for five minutes while holding eyelids open; see a physician. If no saline is easily available, flush eyes with plenty of clean water for 15 minutes; see a physician.
- 4.3 Inhalation : Remove individual(s) to fresh air. Provide protection before allowing re-entry.
- 4.4 Ingestion : No ingestion effects known. Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Flammability class:

Not Applicable

5.2 Flash point:

Not Applicable

5.3 Fire and explosive properties:

This product has a high volume resistivity and a propensity to build up static electricity which may be discharged as spark. A spark can be an ignition source for solvent vapor/air mixtures. If you add this product to Ba solvent, ensure appropriate safe handling practices such as provision for inerting flammable vapors and measures such as those cited above. As with all organic dusts, fine particles suspended in air in critical proportions and in the presence of an ignition source may ignite and/or explode. Dust may be sensitive to ignition by electrostatic discharge, electrical arcs, sparks, welding torches, cigarettes, open flame, or other significant heat sources. As a precaution, implement standard safety measures for handling finely divided organic powders. See Section 7 for suggested measures. Typical results expected for this family of products:

Minimum explosive concentration: 130 g/m³

Minimum ignition energy: 1.60 joules (dispersed dust cloud)

Deflagration Index, Kst (estimate): 130 bar m/sec

Volume resistivity: $3.24 \times 10^{+16}$ ohm-cm

Maximum rate of pressure rise: 380 bars @ 500 g/m³

Maximum explosion pressure: 4.8 bars @ 500 g/m³

Ignition temperature of dust cloud: 520°C

5.4 Suitable extinguishing media

Water, dry chemical agent (ABC) type, CO₂, foam. At extinction, avoid the scattering of burning material and avoid creating dust hazard.

5.5 Fire Fighting Instructions

Avoid those streams or any method which will create dust clouds. Wear self-contained breathing apparatus (SCBA) and approved protective clothing.

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6.1 Personal precautions

Do not breath dust. Avoid ignition source. Avoid contact with eyes and skin. Use dust mask, gloves made from anti static material and protecting glasses. Wash hands at the end of working.

6.2 Environmental precautions

Using care to avoid dust generation, vacuum or sweep into a closed container for refuse or disposal.

6.3 Methods for cleaning

Contact with water creates a very slippery film. If this occurs, the film can be broken down for clean up with detergent solution.

7. HANDLING AND STORAGE

7.1 Handling

- Dust generation should be minimised and every ignition source such as fire, static sparks, open flame..., even in a dosed pipe line equipment should be strictly prohibited. Use proper earthing techniques on all equipment to avoid static loading.

- Ensure good ventilation. Do not smoke, eat or drink at the workplace.

7.2 Storage

- Store In original containers in cool, dry area and protect fro m light.

- Do not store near heat sources, boilers, heaters.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Technical protective measures

: use proper earthing techniques on all equipment.

8.2 Exposure control limits

: none.

8.3 Respiratory protection

: use dust masks.

8.4 Hand protection

: use gloves from anti-static material

8.5 Eye protection

: wear suitable safety glasses. Do not wear contact lenses.

8.6 Skin protection

: wear overalls and closed footwear.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Powder
Appearance/Colour	White
Odor	Slight acetic
Solubility (In Water)	Appreciable
pH Value	2.5 – 3.0 @ 1% in water
Boiling range	Not Applicable
Vapor Pressure (mmHg)	Not Applicable
Melting Point	Not Available
Evaporation Rate	Not Volatile
Solubility In Water	Appreciable
Vapor Density	Not Volatile
Partition Coefficient	Not Available
% Volatile Weight	(moisture) < 2.0%

10. STABILITY AND REACTIVITY

Stability : This product is stable.

Incompatibility with other Materials : Heat may be generated if polymer comes in contact with strong basic materials such as ammonia, sodium hydroxide, potassium hydroxide or strongly basic amines.

Hazardous Polymerization : Hazardous polymerization will not occur.

Hazardous decomposition products : Carbon Monoxide, Carbon Dioxide, Hydrocarbons and Irritating vapors.

11. TOXICOLOGICAL INFORMATION

<u>Route</u>	<u>Exposures and Dose</u>
Oral	Rat LD50 > 5000 mg/kg
Skin	Rabbit LD50>5000 mg/kg

Chronic oral toxicity: No Significant effects

12. ECOLOGICAL INFORMATION

This product is not biodegradable; do not inhibit waste treatment bacteria; and do not pass through typical wastewater treatment to the environment.

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13. DISPOSAL CONSIDERATIONS

Dispose of this product is not known to be defined or desingated as hazardous. Land disposal must be in closed containers.

14. TRANSPORT INFORMATION

Not a dangerous good within the meaning of transportation regulations.

15. REGULATORY INFORMATION

Not a dangerous material.

Immediate (acute) Health	N	Fire	N
Delayed (Chronic) Health	N	Reactive	N
		Sudden Release of Pressure	N

16. OTHER INFORMATION

Miscellaneous information

None

References

Relevant manuals and publications

Own examinations

Toxicological and ecotoxicological studies.

The information set forth herein has been gathered from standard reference materials. The information containing herein is based on the present state of our knowledge and is intended to describe our product from the view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Safe handling and use remain the responsibility of the customer.