

Material Safety Data Sheet CARBOPOL® 940 POLYMER,22\*8OZ

Prepared according to 29CFR 1910.1200.

Chemical Product and Company Identification

THE LUBRIZOL CORPORATION 9921 BRECKSVILLE RD BRECKSVILLE, OH 44141 216-447-5000

**Product Trade Name** 

CARBOPOL® 940 POLYMER,22\*8OZ

**CAS Number Synonyms** 

9003-01-4

**Generic Chemical Name** 

Carbomer Polyacıylic acid

**Product Type** 

Base Carbopol-Personal Care

Preparation/Revision Date

**Transportation Emergency Phone** 

04 November 2013 FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the

No.

MSDS No.

13760040-6501111-3170341-102103

Hazards Identification

Appearance White powder. Odor Slight acetic Principal Hazards Caution

· Airborne dust may form explosive mixtures with air.

• Dusts may be harmful if inhaled.

· Contains component (s) which cause cancer.

# See Section 11 for complete health hazard information.

| 3 Composition/Informa | tion on Ingredients |
|-----------------------|---------------------|
|-----------------------|---------------------|

# **Hazardous Ingredients**

| Comp    | CAS No. | Percentage (by wt.) | Carcinogen   |
|---------|---------|---------------------|--|
| Benzene | 71-43-2 | 0.5%                | IARC Human Carcinogen NTP Carcinogen OSHA Carcinogen |

### (N/E) - None established

| 4                      | First Aid Measures  |
|------------------------|---|
| Eyes                   | Immediately flush eyes with plenty of one percent (1%) physiological saline solution for five (5) minutes while holding eyelids open. If no saline is available, flush with plenty of clean water for fifteen (15) minutes. See a physician. Water (moisture) swells this product into a gelatinous film which may be difflicult to remove from the eye using only water. |
| Skin                   | Wash with soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse  |
| Inhalation             | Remove exposed person to fresh air if adverse effects are observed. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention.  |
| Oral                   | Treat symptomatically. Get medical attention.   |
| Additional Information | If exposed or concerned: Get medical attention.   |
| 5                      | Fire Fighting Measures  |
| Flash Point            | Not applicable  |
| Fasta and the Madia    |   |

**Extinguishing Media** CO2, dry chemical, foam, water spray, water fog. Carbon dioxide may be ineffective on larger fires due to a lack of cooling

capacity which may result in reignition. Avoid hose stream or any method which will create dust clouds

**Firefighting Procedures** Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full

facepiece, coat, pants, gloves and boots

Unusual Fire & Explosion Hazards Solid does not readily release flammable vapors. Material can form an explosive organic dust air mixture. See section 10 for

additional information.

CARBOPOL® 940 POLYMER.22\*80Z

Fire and Explosive Properties -

Min. Explosive Concentration

0.13 oz/ft3 (130 g/m3)

Min. Ignition Energy

> 0.03 joules

**Deflagration Index** 

130 bar m/sec (6190 psi ft/sec)

Max. Rate of Pressure Rise

5500 psi/sec @ 0.5 oz/ft3 (379.21 bar/s @ 501 g/m3)

Max. Pressure of Explosion

70 psi @ 0.5 oz/ft3 (4.83 bar @ 501 g/m3)

Volume Resistivity

0.32 x 10+15 ohm-cm

**Explosion Severity** 

2.02 (Severe)

Ignition Temperature of Dust Cloud 520 °C (968 °F)

This product has a high volume resistivity and a propensity to build up static electricity which may be discharged as a spark. A spark can be an ignition source for solvent vapor/air mixtures. If you add this product to a solvent, ensure appropriate safe handling practices such as provision for inerting flammable vapors. 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.

## Accidental Release Measures

**Spill Procedures** 

Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Prevent entry into sewers and waterways. Pick up free solid for recycle and/or disposal. Avoid raising a dust. Wash spill area with detergent. Material is slippery when wet.

## Handling and Storage

**Pumping Temperature** 

Not applicable.

**Maximum Handling Temperature** 

Not determined

**Handling Procedures** 

Keep material away from heat, sparks, pilot lights, static electricity and open flame. Avoid creating dust. Maintain good housekeeping practices. Avoid drinking, tasting, swallowing or ingesting this product. Avoid inhalation of dust, aerosol, mist, spray, fume, or vapor. Use with appropriate and adequate ventilation. Avoid contact with eyes, skin and clothing. Ground and bond containers when transferring material. Avoid prolonged skin contact. Launder contaminated clothing before reuse. Dispose of packaging or containers in accordance with local, regional, national and international regulations.

**Maximum Storage Temperature** 

Storage Procedures

Store in a cool, dry, well-ventilated area. Keep container closed when not in use. Store locked up. See section 10 for

incompatible materials.

**Maximum Loading Temperature** 

Not determined.

| E | sposure Controls/Personal Protection |  |
|---|--------------------------------------|--|
|   |                                      |  |

# **Exposure Limits**

|         | 5.440 PH 54.0 | OSHA       | Exposure Guid<br>ACGIH | and the second s | Other        |      |
|---------|---------------|------------|------------------------|--|--------------|------|
| Comp    | TWA           | STEL       | TWA                    | STEL   | TWA          | STEL |
| Benzene | 10 ppm        | 25 ppm (c) | 0.50 ppm (s)           | 2.50 ppm   | 0.10 ppm (l) | N/E  |

- (s) Skin exposure
- (p) Proposed limit
- (c) Ceiling exposure
- (l) Recommended exposure limit
- (u) Supplier recommended exposure limit
- (N/E) None established

Confidential - See section 1 for HMIRA exemption status

Other Exposure Limits

The industry-recommended permissible exposure limit for respirable polyacrylate dusts is 0.05 mg/m3

**Engineering Controls** 

If use generates a dust, local exhaust ventilation is recommended. Prevent inhalation by providing effective general and, when necessary, local exhaust ventilation to draw dust away from workers. Avoid high concentrations of dust in air and

accumulation of dust on equipment

Gloves Procedures

Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically

protective gloves

**Eve Protection** 

Safety glasses or goggles.

Respiratory Protection

Use NIOSH/MSHA approved respirator with a High Efficiency Particulate Air (HEPA) filter if the recommended exposure limit is exceeded. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever

workplace conditions require the use of a respirator.

**Clothing Recommendation** 

Gloves, coveralls, apron, boots as necessary to minimize contact.

# **Physical and Chemical Properties**

Flash Point Upper Flammable Limit Not applicable. Not determined. CARBOPOL® 940 POLYMER,22\*8OZ

Lower Flammable Limit

Not determined.

**Autoignition Point** 

520 °C, 968 °F

**Explosion Data** 

Dust can form explosive mixtures in the air.

Vapor Pressure

Not determined.

pН

2.5 - 3 at 1% in water

Specific Gravity

1.4 (20 °C)

Bulk Density

< 0.24 Kg/L, < 2 Lb/gal Material will swell in water.

Water Solubility

Not determined

Percent Solid
Percent Volatile

< 2%

Volatile Organic Compound

Not determined. Not determined.

Vapor Density Evaporation Rate

Not determined.

Odor

Slight acetic

Appearance

White powder.

Viscosity

Not determined

Odor Threshold

Not determined.

**Boiling Point** 

Not determined. Not determined.

Pour Point Temperature Melting / Freezing Point

Not determined.

The above data are typical values and do not constitute a specification. Vapor pressure data are calculated

unless otherwise noted.

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Stability and Reactivity

Stability

Material is normally stable at moderately elevated temperatures and pressures.

**Decomposition Temperature** 

Not determined.

Incompatibility

Heat may be generated if polymer comes in contact with strong basic materials like ammonia, sodium hydroxide or strong

basic amines.
Will not occur.

Polymerization
Thermal Decomposition

Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.

Conditions to Avoid

Not determined.

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Toxicological Information

- ACUTE EXPOSURE -

**Eye Irritation** 

Not expected to cause eye irritation. Based on data from similar materials. Particulates may cause mechanical irritation. Solid

particles (powder or dust) on the eye may cause pain and irritation.

Skin Irritation

Not expected to be a primary skin irritant. Based on data from similar materials. Contact dermatitis may occur in sensitive individuals under extreme and unusual conditions of prolonged and repeated contact, such as high exposure accompanied by elevated temperature and occlusion by clothing. This effect may be the result of the product's hygroscopic properties,

Respiratory Irritation

Not expected to cause nose, throat and lung irritation. Based on data from similar materials. Breathing of dust may cause

coughing, mucous production, and shortness of breath.

**Dermal Toxicity** 

The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.

Inhalation Toxicity

Avoid inhalation of dust. Animal studies indicate the inhalation of respirable polyacrylate dust may cause inflammatory

changes in the lung.

abrasion, or pH.

Oral Toxicity
Dermal Sensitization
Inhalation Sensitization

The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials. Not expected to cause skin sensitization. Based on data from components or similar materials.

No data available to indicate product or components may be respiratory sensitizers.

- CHRONIC EXPOSURE -

**Chronic Toxicity** 

A two-year inhalation study in rats exposed to a respirable, water-absorbent sodium polyacrylate dust resulted in lung effects such as inflammation, hyperplasia, and tumors. There were no observed adverse effects at exposures of 0.05 mg/m3. In addition, long-term medical monitoring of potentially exposed workers has not revealed lung effects such as those observed in the rat. However, the inhalation of respirable dusts should be avoided by implementing respiratory protection measures and observing the recommended permissible exposure limit of 0.05 mg/m3.

Carcinogenicity

Benzene is recognized as causing leukemia in humans.

Mutagenicity

Benzene has been examined for mutagenicity both in vitro and in vivo assays. It has shown mixed results for mutagenicity in

vitro although in mammalian cells there is overall evidence for potential mutagenic activity. Benzene has been shown to be mutagenic in vivo in both somatic cells and germ cells.

Reproductive Toxicity

No data available to indicate either product or components present at greater than 0.1% that may cause reproductive

toxicity.

Teratogenicity

No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

# CARBOPOL® 940 POLYMER,22\*8OZ

#### - ADDITIONAL INFORMATION -

Other

Pre-existing skin conditions may be aggravated by prolonged or repeated exposure. Persons with sensitive airways (e.g., asthmatics) may react to vapors. This material readily absorbs moisture and may become thick and gelatinous upon contact with mucous membranes of the eye, or upon inhalation into the nasal passages.

12 Ecological Information

- ENVIRONMENTAL TOXICITY -

Freshwater Fish Toxicity

The acute LC50 is > 1000 mg/L based on actual data.

Freshwater Invertebrates Toxicity

The acute EC50 is > 1000 mg/L based on actual data.

Algal Inhibition Saltwater Fish Toxicity

Not determined.

Saltwater Invertebrates Toxicity

Not determined.

The acute EC50 is 100 - 1000 ppm based on component data.

Bacteria Toxicity
Miscellaneous Toxicity

Not determined.

- ENVIRONMENTAL FATE -

Biodegradation

At least 25% of the components in this product show limited biodegradation based on OECD 301-type test data. At least

25% of the components in this product show limited biodegradation based on OECD 302-type test data.

Bioaccumulation

Less than 1.0% of the components display no potential to bioconcentrate.

Soil Mobility

Not determined.

13 Disposal Considerations

Waste Disposal

This material, if discarded, is a hazardous waste under RCRA Regulation 40 CFR 261. 0.5% Benzene, CAS no. 71-43-2, D018. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and

Local regulations.

14 Transport Information

ICAO/IATA I ICAO/IATA II

Not regulated.
Not regulated.
Not regulated.

IMDG
IMDG EMS Fire
IMDG EMS Spill
IMDG MFAG

Not applicable.
Not applicable.
Not applicable.

MARPOL Annex II USCG Compatibility

Not determined.

U.S. DOT Bulk

UN3077 Environmentally hazardous substance, solid, n.o.s. (Benzene) 9, III, RQ (Benzene)

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DOT NAERG

UN3077 Environmentally hazardous substance, solid, n.o.s. (Benzene) 9, III, RQ (Benzene)

U.S. DOT (Intermediate)
U.S. DOT Intermediate NAERG

171 Not regulated.

U.S. DOT Non-Bulk U.S. DOT Non-Bulk NAERG

Not applicable.

Canada Mexico

Not regulated.
Not regulated.

Bulk Quantity
Intermediate Quantity

Non-Bulk Quantity

25000 KG, 55115 lbs. 11000 KG, 24251 lbs. 400 KG, 882 lbs.

Review classification requirements before shipping materials at elevated temperatures.

15 Regulatory Information

- Global Chemical Inventories -

USA

All components of this material are on the US TSCA Inventory or are exempt.

Other TSCA Reg.

None known.

EU

To obtain information on the REACH compliance status of this product, please visit Lubrizol.com/REACH, or e-mail us at

REACH\_MSDS\_INQUIRIES@Lubrizol.com

Japan Australia All components are in compliance with the Chemical Substances Control Law of Japan. All components are in compliance with chemical notification requirements in Australia.

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All components are in compliance with chemical notification requirements in New Zealand.

Canada All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic

Substances List.

Switzerland All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.

Korea All components are in compliance in Korea.

Philippines All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of

1990 (R.A. 6969).

China All components of this product are listed on the Inventory of Existing Chemical Substances in China.

Taiwan All components of this product are listed on the Taiwan inventory.

- Other U.S. Federal Regulations -

SARA Ext. Haz, Subst. This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances

**SARA Section 313** 0.5% Benzene, CAS no. 71-43-2

**SARA 311 Classifications** 

| Acute Hazard      | No  |
|-------------------|-----|
| Chronic Hazard    | Yes |
| Fire Hazard       | No  |
| Reactivity Hazard | No  |

**CERCLA Hazardous Substances** 

# Transit Reportable Quantities

| Benzene   | 2005                   |       | 909 KG                       |
|-----------|------------------------|-------|------------------------------|
| Component | Reportable Quantity RQ | Units | Reportable Quantity RQ Units |

#### - State Regulations -

Cal. Prop. 65

This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects: < 1

ppm arsenic < 1 ppm lead 0.499% Benzene, CAS no. 71-43-2

# - Product Registrations -

**U.S. Fuel Registration** Finnish Registration Number Not applicable. Not Registered

Swedish Registration Number

Not Registered

Norwegian Registration Number **Danish Registration Number** 

Not Registered

**Swiss Registration Number** 

Not Registered

Not Registered

Not Registered Italian Registration Number

- Other / International -

Miscellaneous Regulatory

Information

Not determined.

Other Information

| 1 | o  |   |  |  |
|---|--|---|--|--|
|   | OMOCONOMICO COMPANIONA PROPERTY OF THE PROPERT | · | <br>······································ |  |

| Health | Fire | Reactivity | Special |
|--------|------|------------|---------|
| 1      | 1    | 0          | N/E     |

(N/E) - None established

**HMIS Codes** 

US NEPA Codes

| Health | Fire 2 | Reactivity |
|--------|--------|------------|
| 1*     | 1      | 0          |

Precautionary Labels

Caution.

· Airborne dust may form explosive mixtures with air.

· Dusts may be harmful if inhaled.

Contains component (s) which cause cancer.

**Revision Indicators** 

Section: 1 Product type.

Changed: 21 August 2013

Section: 11 Cacinogenicity.

Changed: 21 August 2013

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