



Prepared according to Annex II of EC Regulation 1907/2006.

| | |
|----------|---|
| 1 | Substance/Product Identification |
|----------|---|

Product Trade Name **CARBOPOL® ULTREZ 21 POLYMER**
Company *The Lubrizol Corporation*
 29400 Lakeland Boulevard
 Wickliffe, Ohio 44092
 Tel: (440) 943-4200
E-mail contact EUSDS@lubrizol.com
CAS Number Confidential.
Synonyms Confidential.
Preparation/Revision Date 03 December 2008
Generic Chemical Name Polyacrylic acid
Product Type Base Carbopol-Personal Care
Emergency Phone Number FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.)
MSDS No. 26503488-4103322-1128860-102103

| | |
|----------|-------------------------------|
| 2 | Hazards Identification |
|----------|-------------------------------|

Symbol(s)

Product Classification R36 -- Irritating to eyes.

| | |
|----------|---|
| 3 | Composition/Information on Ingredients |
|----------|---|

Hazardous Ingredients

| Comp | Percentage (by wt.) | Symbol(s) | Risk Phrase(s) | EU Number |
|--------------------|-------------------------|-----------|------------------------|-----------|
| Alcohol ethoxylate | From 1 to 4.9 percent | Xi | R38 R41 | Polymer |
| Cyclohexane | From 0.1 to 0.9 percent | F N Xi | R11 R38 R50/53 R65 R67 | 203-806-2 |

| | |
|----------|---------------------------|
| 4 | First Aid Measures |
|----------|---------------------------|

Ingestion DO NOT INDUCE VOMITING. Get immediate medical attention.
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. If eye irritation persists, get medical attention. Water (moisture) swells this product into a gelatinous film which may be difficult to remove from the eye using only water.
Skin Wash with soap and water. Remove contaminated clothing. If skin irritation occurs, get medical attention. 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. |
| Additional Information | Note to physician: Treat symptomatically. |

| | |
|----------|-------------------------------|
| 5 | Fire Fighting Measures |
|----------|-------------------------------|

| | |
|---|--|
| Flash Point | Not applicable. |
| Extinguishing Media | CO ₂ , 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. |

-- Fire and Explosive Properties --

| | |
|-------------------------------------|--|
| Min. Explosive Concentration | 115 g/m ³ (0.115 oz/ft ³) |
| Min. Ignition Energy | > 0.05 joules |
| Volume Resistivity | 4.58 x 10 ⁺¹⁵ ohm-cm |
| | 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. |

| | |
|----------|------------------------------------|
| 6 | Accidental Release Measures |
|----------|------------------------------------|

| | |
|-------------------------|---|
| Spill Procedures | Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Pick up free solid for recycle and/or disposal. Avoid raising a dust. Wash spill area with detergent. Material is slippery when wet. |
|-------------------------|---|

| | |
|----------|-----------------------------|
| 7 | 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. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Avoid drinking, tasting, swallowing or ingesting this product. Avoid breathing dust, fume, gas, mist, vapors or spray. Avoid inhalation of dust, aerosol, mist, spray, fume, or vapor. Use with appropriate and adequate ventilation. Ground and bond containers when transferring material. Avoid prolonged skin contact. |
| Maximum Storage Temperature | Not determined. |
| Storage Procedures | Store in a cool, dry, well-ventilated area. Keep container closed when not in use. |
| Loading Temperature | Not determined. |

| | |
|----------|--|
| 8 | Exposure Controls/Personal Protection |
|----------|--|

Exposure Limits**EU**

| Comp | CAS No. | Long Term (8 Hours T.W.A.) | Short Term (15 mins.) |
|-------------|----------|----------------------------|-----------------------|
| Cyclohexane | 110-82-7 | 200 ppm | N/E |

UK

Not applicable.

Ireland

| Comp | CAS No. | Long Term (8 Hours T.W.A.) | Short Term (15 mins.) |
|-------------|----------|----------------------------|-----------------------|
| Cyclohexane | 110-82-7 | 100 ppm | 300 ppm |

India

Not applicable.

Cyprus

Not applicable.

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

Other Exposure Limits

None known.

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.

Hand Protection

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

Eye Protection

Safety glasses or goggles.

Respiratory Protection

Use 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

Long sleeve shirt is recommended. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction.

| | |
|----------|---|
| 9 | Physical and Chemical Properties |
|----------|---|

Flash Point

Not applicable.

Upper Flammable Limit

Not determined.

Lower Flammable Limit

Not determined.

Autoignition Point

~ 520 °C, ~ 968 °F

Explosion Data

Dust can form explosive mixtures in the air.

Vapour Pressure

Not determined.

pH

2.5 - 3.5 at 1% in water

| | |
|----------------------------------|-------------------------------|
| Specific Gravity | 1.4 (20 °C) |
| Bulk Density | < 0.24 Kg/L, < 2 Lb/gal |
| Water Solubility | Material will swell in water. |
| Percent Solid | Not determined. |
| Percent Volatile | Not determined. |
| Volatile Organic Compound | < 0.6% |
| Vapour Density | Not determined. |
| Evaporation Rate | Not determined. |
| Odour | Mild acrylic |
| Appearance | White powder. |
| Viscosity | Not determined. |
| Odour Threshold | Not determined. |
| Boiling Point | Not determined. |
| Pour Point Temperature | Not determined. |
| Melting / Freezing Point | Not determined. |

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

| | |
|-----------|---------------------------------|
| 10 | 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. |
| Polymerization | Will not occur. |
| Thermal Decomposition | Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. |

| | |
|-----------|----------------------------------|
| 11 | Toxicological Information |
|-----------|----------------------------------|

-- ACUTE EXPOSURE --

| | |
|---------------------------------|--|
| Eye Irritation | Moderate to strong eye irritant. 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. Prolonged or repeated contact as from clothing wet with the material may cause severe irritation. 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, abrasion, or pH. |
| Respiratory Irritation | If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components and similar materials. Exposure to a dust may be irritating. 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. |
| Oral Toxicity | The LD50 in rats is > 5000 mg/kg. Based on data from components or similar materials. |
| Dermal Sensitization | Not expected to cause skin sensitization. Based on data from similar materials. |
| Inhalation Sensitization | No data available to indicate product or components may be respiratory sensitizers. |

-- CHRONIC EXPOSURE --

| | |
|------------------------------|---|
| Chronic Toxicity | Adverse lung effects were observed in rats receiving life-long inhalation exposure to respirable polyacrylate dust. Effects included inflammation, hyperplasia, fibrosis, and alveolar abnormalities. Occupational exposure to respirable polyacrylate dusts must be avoided by implementing the recommended respiratory protection measures (See Section 8) and observing the recommended permissible exposure limit of 0.05 mg/m ³ . |
| Carcinogenicity | A lifetime (2-year) inhalation study in rats exposed to respirable polyacrylate dust resulted in inflammation and tumors. The tumorigenic response may be a “rat specific” finding and thus not relevant to humans. |
| Mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| 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. |
| 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 10 - 100 mg/L based on component data. |
| Freshwater Invertebrates Toxicity | The acute EC50 is 10 - 100 mg/L based on component data. |
| Algae Toxicity | Not determined. |
| Saltwater Fish Toxicity | Not determined. |
| Saltwater Invertebrates Toxicity | Not determined. |
| Bacteria Toxicity | Not determined. |
| 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 potentially bioconcentrate, based on measured octanol/water partition coefficients. |
| Soil Mobility | Not determined. |
| WGK | WGK = 1 according to the Water Hazardous Directive, VwVwS, dated May 17, 1999. |

| | |
|-----------|--------------------------------|
| 13 | Disposal Considerations |
|-----------|--------------------------------|

| | |
|-----------------------|---|
| Waste Disposal | This material, if discarded, should be considered a European hazardous waste in accordance with European Law. H4. |
|-----------------------|---|

| | |
|-----------|------------------------------|
| 14 | Transport Information |
|-----------|------------------------------|

| | |
|---------------------|---------------|
| ICAO/IATA II | Not regulated |
|---------------------|---------------|

| | |
|------------------------------|-----------------|
| IMDG | Not regulated |
| IMDG EMS Fire | Not applicable. |
| IMDG EMS Spill | Not applicable. |
| IMDG MFAG | Not applicable. |
| MARPOL Annex II | Not determined. |
| USCG Compatibility | Not determined. |
| ADR/RID | Not regulated |
| ADR/RID Hazard ID No. | Not applicable. |

Review classification requirements before shipping materials at elevated temperatures.

| | |
|----|-------------------------------|
| 15 | Regulatory Information |
|----|-------------------------------|

Symbol(s)



Indication of Danger

Irritant

Precautionary Labels

R36 -- Irritating to eyes.
 S26 -- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 S33 -- Take precautionary measures against static discharges.
 S39 -- Wear eye/face protection.

Other Label Information

None.

-- Global Chemical Inventories --

| | |
|--------------------|--|
| USA | All components of this material are on the US TSCA Inventory or are exempt. |
| EU | All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC. |
| Japan | All components are in compliance with the Chemical Substances Control Law of Japan. |
| Australia | All components are in compliance with chemical notification requirements in Australia. |
| New Zealand | May require notification before sale under New Zealand regulations. |
| 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. |

-- Product Registrations --

| | |
|--------------------------------------|----------------|
| Finnish Registration Number | Not Registered |
| Swedish Registration Number | Not Registered |
| Norwegian Registration Number | Not Registered |
| Danish Registration | |

Number Not Registered
Swiss Registration Number Not Registered
Italian Registration Number Not Registered
Korean Registration Number LOC filed 5/15/08
U.S. Dept of Agriculture This product has not been filed with the USDA to support H2 approvals.
NSF Nonfood Compounds Registration This product has not been filed with the NSF to support H1 or H2 approvals.

-- Other / International --

FDA Approval Not applicable.

| | |
|-----------|--------------------------|
| 16 | Other Information |
|-----------|--------------------------|

HMIS Codes

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

Relevant R Phrases

R11 -- Highly flammable.
 R36 -- Irritating to eyes.
 R38 -- Irritating to skin.
 R41 -- Risk of serious damage to eye.
 R50/53 -- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
 R65 -- Harmful: may cause lung damage if swallowed.
 R67 -- Vapors may cause drowsiness or dizziness.

Revision Indicators

| Section | Changed |
|----------------------------|-----------------|
| 1 Product type. | 3 November 2008 |
| 5 Minimum ignition energy. | 3 November 2008 |
| 9 Odor threshold. | 3 November 2008 |
| 9 Percent volatile. | 3 November 2008 |
| 9 Viscosity. | 3 November 2008 |
| 12 WGK. | 3 December 2008 |

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local regulations remains the responsibility of the user.