

# SAFETY DATA SHEET

#### 1. Identification of the substance or mixture and of the supplier

| Product identifier   |                                 |  |
|--|---------------------------------|--|
| Product name:  | CARBOPOL® 1342 NF POLYMER       |  |
| Additional identificationChemical name:Modified acrylic polymerCAS-No.:Not applicable. |                                 |  |
| Recommended use and res  | triction on use                 |  |
| Recommended use:   | Base Carbopol-Pharma            |  |
| Restrictions on use:   | None identified.                |  |
| Details of the supplier of the   | e safety data sheet             |  |
| Supplier   |                                 |  |
| Company Name:  | LUBRIZOL LIMITED                |  |
| Address: THE KNOWLE, NETHER LANE   |                                 |  |
|  | HAZELWOOD, DERBYSHIRE, DE56 4AN |  |

# Emergency telephone number:

FOR TRANSPORT EMERGENCY CALL CHEMTREC (+1) 703 527 3887

GB

#### 2. Hazards identification

Telephone:

#### Classification of the substance or mixture

Prepared according to Global Harmonized System (GHS) standards.

(44) 01332-842211

Not classified

| Label Elements                | not applicable   |
|-------------------------------|------------------|
| Other hazards which do not    | None identified. |
| result in GHS classification: |                  |

# 3. Composition/Information on Ingredients

#### Mixtures

| Chemical name | CAS number | Percent by Weight |
|---------------|------------|-------------------|
| Acrylic acid  | 79-10-7    | 0.1 - 0.5%        |



# 4. First aid measures

| Description | of | first | aid | measures |
|-------------|----|-------|-----|----------|
|-------------|----|-------|-----|----------|

| Inhalation:  | If breathing is labored, administer oxygen. If breathing has stopped, apply<br>artificial respiration. If irritation persists or if toxic symptoms are observed,<br>get medical attention. Remove exposed person to fresh air if adverse<br>effects are observed.   |
|--|---|
| Eye contact:   | Water (moisture) swells this product into a gelatinous film which may be difflicult to remove from the eye using only water. 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. Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. |
| Skin Contact:  | Wash with soap and water. If skin irritation occurs, get medical attention.   |
| Ingestion:   | Treat symptomatically. Get medical attention.   |
| Most important symptoms and effects, both acute and delayed: | See section 11.   |

# Indication of any immediate medical attention and special treatment needed

| Treatment:  | Treat symptomatically.   |
|---|--|
| 5. Fire-fighting measures                               |  |
| General Fire Hazards:                                   | Avoid hose stream or any method which will create dust clouds.                               |
| Extinguishing media<br>Suitable extinguishing<br>media: | Use water spray, dry chemical or foam for extinction. CO2 may be ineffective on large fires. |
| Unsuitable extinguishing media:                         | Not determined.  |
| Specific hazard arising from the chemical:              | See section 10 for additional information.   |
| Advice for firefighters                                 |  |



| Special fire fighting procedures:  | This material has been evaluated and is considered to be a risk for dust<br>explosion. It is categorized as Dust Explosion Class ST1. Material can form<br>an explosive organic dust air mixture. As with all organic dusts, fine<br>particles suspended in air in critical proportions and in the presence of an<br>ignition source may ignite and/or explode. Dust may be sensitive to ignition<br>by electrostatic discharge, electrical arcs, sparks, welding torches,<br>cigarettes, open flame, or other significant heat sources. This product has a<br>high volume resistivity and a propensity to build up static electricity which<br>may be discharged as a spark. A spark can be an ignition source for<br>solvent vapor/air mixtures. As a precaution, implement standard safety<br>measures for handling finely divided organic powders. If you add this<br>product to a solvent, ensure appropriate safe handling practices such as<br>provision for inerting flammable vapors. Take care to minimze airborne<br>dust. Solid does not readily release flammable vapors. |
|--|--|
| Special protective<br>equipment for fire-fighters:                         | Recommend wearing self-contained breathing apparatus.  |
| 6. Accidental Release Measure  | S  |
| Personal precautions,<br>protective equipment and<br>emergency procedures: | Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations.   |
| Environmental Precautions:   | Prevent entry into sewers and waterways. Take precautions to avoid<br>release to the environment. Avoid release to the environment. Do not<br>contaminate water sources or sewer. Environmental manager must be<br>informed of all major spillages. Prevent further leakage or spillage if safe to<br>do so.   |
| Methods and material for containment and cleaning up:                      | Pick up free solid for recycle and/or disposal. Sweep up and place in a clearly labeled container for chemical waste. Avoid dust formation. Use wet sweeping compound or water to avoid raising a dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container. Wash spill area with detergent. Material is slippery when wet. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation.   |
| Reference to other sections:   | See sections 8 and 13 for additional information.  |
| 7. Handling and Storage:   |  |
| Precautions for safe handling:   | Avoid conditions which create dust. Avoid breathing dust. Avoid contact<br>with eyes and prolonged or repeated contact with skin. Ground container<br>and transfer equipment to eliminate static electric sparks. Keep away from<br>heat, sparks and open flame. Avoid drinking, tasting, swallowing or<br>ingesting this product.<br>Observe good industrial hygiene practices. Provide adequate ventilation.<br>Wear appropriate personal protective equipment.  |
| Maximum Handling<br>Temperature:   | Not determined.  |
| Conditions for safe storage,<br>including any<br>incompatibilities:        | Store in a dry, well-ventilated place. Keep containers closed when not in use. Store away from incompatible materials. See section 10 for incompatible materials.  |



# Maximum Storage < 80 °C Temperature:

# 8. Exposure Controls/Personal Protection

# **Control Parameters:**

# **Occupational Exposure Limits**

|                        | Chemical name | Туре | Exposure Limit Values | Source                                     |
|------------------------|---------------|------|-----------------------|--|
|                        | Acrylic acid  | TWA  | 2 ppm                 | US. ACGIH Threshold Limit Values (02 2012) |
| Nthen eveneeuve limite |               |      |                       |  |

#### Other exposure limits

| Chemical name            | Туре | Exposure Limit Values | Source |
|--------------------------|------|-----------------------|--------|
| Modified acrylic polymer | TWA  | 0,05 mg/m3            |        |

| Appropriate engineering controls: | To prevent dust explosions employ bonding and grounding for operations capable of generating static electricity. Minimize dust generation and accumulation. Provide adequate ventilation.   |  |
|-----------------------------------|---|--|
| Individual protection measu       | res, such as personal protective equipment  |  |
| General information:              | Use personal protective equipment as required.  |  |
| Eye/face protection:              | Use tight fitting goggles if dust is generated. Wear approved chemical safety glasses or goggles where eye exposure is reasonably probable.   |  |
| Skin protection                   |   |  |
| Hand Protection:                  | Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves. Suitable gloves can be recommended by the glove supplier.  |  |
| Other:                            | Long sleeve shirt is recommended.   |  |
| Respiratory Protection:           | 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. Under normal use conditions, respirator is not usually required. Use appropriate respiratory protection if exposure to dust particles, mist or vapors is likely. 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 respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator. |  |
| Hygiene measures:                 | Wash thoroughly after handling. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.  |  |

# 9. Physical and Chemical Properties

| Information on basic physical and chemical properties |        |
|---|--------|
| Appearance  |        |
| Physical state:                                       | solid  |
| Form:   | Powder |
| SDS_REG_GHS - CARBOPOL® 1342 NF POLYMER               |        |



| Color:  | White                         |
|---|-------------------------------|
| Odor:   | Slight acetic                 |
| Odor Threshold:                               | No data available.            |
| pH:   | 2,5 - 3 (1 % Water)           |
| Melting Point:                                | No data available.            |
| Boiling Point:                                | No data available.            |
| Flash Point:                                  | Not applicable.               |
| Evaporation Rate:                             | No data available.            |
| Flammability (solid, gas):                    | No data available.            |
| Upper/lower limit on flammability or explosiv | ve limits                     |
| Flammability Limit - Upper (%):               | No data available.            |
| Flammability Limit - Lower (%):               | No data available.            |
| Vapor pressure:                               | No data available.            |
| Vapor density (air=1):                        | No data available.            |
| Relative density:                             | 1,4 (20 °C)                   |
| Solubility(ies)                               |                               |
| Solubility in Water:                          | Material will swell in water. |
| Solubility (other):                           | No data available.            |
| Partition coefficient (n-octanol/water):      | No data available.            |
| Autoignition Temperature:                     | Approximate 480 °C            |
| Decomposition Temperature:                    | No data available.            |
| Viscosity:                                    | No data available.            |
| Explosive properties:                         | No data available.            |
| Oxidizing properties:                         | No data available.            |
| Pour Point Temperature                        | No data available.            |
| Other information                             |                               |
| Bulk density:                                 | < 0,24 g/ml (25 °C)           |
| Dust Explosion Limit, Lower:                  | 0,13 oz/ft3                   |
| Dust Explosion Description Number<br>Kst:     | 157 - 193 m.b_/s              |
| Minimum ignition energy:                      | 50 - 100 mJ                   |
| Minimum ignition temperature:                 | Approximate 480 °C            |
| Percent Solid:                                | > 98 % (Percent by Weight)    |
| Max. Rate of Pressure Rise:                   | 5 500 psi/s (0,5 oz/ft3)      |
| Max. Pressure of Explosion:                   | 70 PSI (0,5 oz/ft3)           |
| Volume Resistivity:                           | 2,49x 10+15 ohm-cm            |
| Percent volatile:                             | < 2 % (Percent by Weight)     |
|   |                               |

# 10. Stability and Reactivity

| Reactivity:                                  | No data available.                          |      |
|--|---|------|
| Chemical Stability:                          | Material is stable under normal conditions. |      |
| Possibility of hazardous reactions:          | Will not occur.                             |      |
| Conditions to avoid:                         | Static discharge. Moisture. Heat.           |      |
| SDS_REG_GHS - CARBOPOL® 1342 NF POLYMER 5/10 |   | 5/10 |



| Incompatible Materials:              | Alkalies. Bases. Strong bases.  |
|--------------------------------------|---|
| Hazardous Decomposition<br>Products: | Thermal decomposition or combustion may generate smoke, carbon monoxide, carbon dioxide, and other products of incomplete combustion. |

# 11. Toxicological Information

#### Information on likely routes of exposure

| Inhalation:   | Harmful if inhaled. |
|---------------|---------------------|
| Ingestion:    | No data available.  |
| Skin Contact: | No data available.  |
| Eye contact:  | No data available.  |

# Information on toxicological effects

| Acute toxicity                                |   |
|---|---|
| <b>Oral</b><br>Product:                       | LD 50 (Rat): > 5 000 mg/kg Not classified   |
| Dermal<br>Product:                            | Not classified for acute toxicity based on available data.  |
| Inhalation<br>Product:                        | Avoid inhalation of dust. Animal studies indicate the inhalation of respirable polyacrylate dust may cause inflammatory changes in the lung. Persons with sensitive airways (e.g., asthmatics) may react to vapors. Breathing of dust may cause coughing, mucous production, and shortness of breath.<br>Not classified for acute toxicity based on available data.   |
| Skin Corrosion/Irritation:<br>Product:        | Classification: Not irritating (Measured); Rabbit.<br>Remarks: Pre-existing skin conditions may be aggravated by<br>prolonged or repeated exposure. Contact dermatitis may occur in<br>sensitive individuals under extreme and unusual conditions of<br>prolonged and repeated contact, such as high exposure<br>accompanied by elevated temperature and occlusion by clothing.<br>This effect may be the result of the product's hygroscopic properties,<br>abrasion, or pH.<br>Not classified as a primary skin irritant. |
| Serious Eye Damage/Eye Irritatior<br>Product: | n:<br>Remarks: Particles in the eyes may cause irritation and smarting.<br>Classification: Not irritating (Measured); Rabbit.<br>Remarks: Not classified as a primary eye irritant.   |
| Respiratory sensitization:                    | No data available   |
| Skin sensitization:<br>Product:               | Classification: Not a skin sensitizer. (Read across) Not a skin sensitizer.   |

# Specific Target Organ Toxicity - Single Exposure:



| Product:   |  |
|--|--|
| Acrylic acid   | Respiratory tract irritation.  |
|  |  |
| Aspiration Hazard:   | No data available  |
| Other effects:<br>Product:   | 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.  |
| Chronic Effects<br>Carcinogenicity:  | No data available  |
| Germ Cell Mutagenicity:  |  |
| Acrylic acid   | Results of vitro mutagenicity tests have been positive.  |
| Acrylic acid   | Results of in vivo mutagenicity tests have been negative.  |
| Reproductive toxicity:<br>Specific Target Organ Toxicity - I<br>Product:<br>Acrylic acid | No data available<br><b>Repeated Exposure:</b><br>A two-year inhalation study in rats exposed to a respirable, water-<br>absorbent sodium polyacrylate dust resulted in lung effects such as<br>inflammation, hyperplasia, and tumors. There were no observed<br>adverse effects at exposures of 0.05 mg/m3. In addition, long-term<br>medical monitoring of potentially exposed workers has not revealed<br>lung effects such as those observed in the rat. However, the<br>inhalation of respirable dusts should be avoided by implementing<br>respiratory protection measures and observing the recommended<br>permissible exposure limit of 0.05 mg/m3.<br>Prolonged or repeated exposure may cause kidney damage.<br>Unknown: Target Organ(s): Kidney |
| 12. Ecological Information   |  |
| Ecotoxicity  |  |
| Fish<br>Product:   | LC 50 (Bluegill Sunfish, 96 h): 580 mg/l   |
| Acrylic acid   | LC 50 (Rainbow Trout, 4 d): 27 mg/l  |
| Aquatic Invertebrates<br>Product:  | EC 50 (Water flea (Daphnia magna), 48 h): 174 mg/l   |
| Acrylic acid   | EC 50 (Water flea (Daphnia magna), 2 d): 95 mg/l   |
| Toxicity to Aquatic Plants<br>Acrylic acid   | EC 50 (Green algae (Selenastrum capricornutum), 3 d): 0,13 mg/l  |

Acrylic acid



| Toxicity to soil dwelling or                                    | ganisms<br>No data available  |
|---|---|
| Sediment Toxicity   | No data available   |
| Toxicity to Terrestrial Plant                                   | ts<br>No data available   |
| Toxicity to Above-Ground  | Organisms<br>No data available  |
| Toxicity to microorganisms<br>Acrylic acid                      | s<br>EC 50 (Sludge, 0,1 d): 900 mg/l  |
| Persistence and Degradability<br>Biodegradation<br>Acrylic acid | OECD TG 301 D, 80 %, 28 d, Readily biodegradable  |
| Bioaccumulative Potential<br>Bioconcentration Factor (B         | BCF)<br>No data available   |
| Partition Coefficient n-octa<br>Acrylic acid                    | n <b>ol / water (log Kow)</b><br>Log Kow: 0,46 (calculated)   |
| Mobility:   | No data available   |
| Other Adverse Effects:  | No data available.  |
| 13. Disposal Considerations                                     |   |
| Disposal methods:   | Treatment, storage, transportation, and disposal must be in accordance<br>with applicable Federal, State/Provincial, and Local regulations.<br>Since emptied containers retain product residue, follow label warnings even<br>after container is emptied. |
| Contaminated Packaging:   | Container packaging may exhibit hazards.  |
| 14. Transport Information                                       |   |

ΙΑΤΑ

Not regulated.

# International standards

IMDG

Not regulated.

#### Transport in bulk according to Annex II of MARPOL and the IBC Code None known.

Shipping descriptions may vary based on mode of transport, quantities, temperature of the material, package size, and/or origin and destination. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material. For transportation, steps must be taken to prevent load shifting or materials falling, and all relating legal statutes should be obeyed. Review classification requirements before shipping materials at elevated temperatures.



# **15. Regulatory Information**

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

#### **Inventory Status**

Australia (AICS)

All components are in compliance with chemical notification requirements in Australia.

Canada (DSL/NDSL)

All substances contained in this product are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List (DSL) or are exempt.

China (IECSC)

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

European Union (REACh)

To obtain information on the REACH compliance status of this product, please e-mail REACH@SDSInquiries.com.

Japan (ENCS)

All components are in compliance with the Chemical Substances Control Law of Japan.

#### Korea (ECL)

All components are in compliance in Korea.

New Zealand (NZIoC)

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

Philippines (PICCS)

All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).

#### Switzerland (SWISS)

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

Taiwan (TCSCA)

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

#### United States (TSCA)

All substances contained in this product are listed on the TSCA inventory or are exempt. The information that was used to confirm the compliance status of this product may deviate from the chemical

information shown in Section 3.

#### 16. Other Information

**Key literature references and** Internal company data and other publically available resources. **sources for data:** 

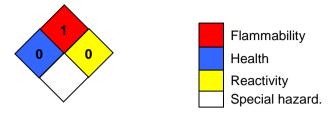
#### **HMIS Hazard ID**

| Health           | 0 |
|------------------|---|
| Flammability     | 1 |
| Physical Hazards | 0 |



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

#### **NFPA Hazard ID**



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

| Issue Date: | 04.12.2017  |
|-------------|---|
| Disclaimer: | As the conditions or methods of use are beyond our control, we do not<br>assume any responsibility and expressly disclaim any liability for any use of<br>this product. Information contained herein is believed to be true and accurate<br>but all statements or suggestions are made without warranty, expressed or<br>implied, regarding accuracy of the information, the hazards connected with<br>the use of the material or the results to be obtained from the use thereof.<br>Compliance with all applicable federal, state, and local regulations remains<br>the responsibility of the user. |