



SAFETY DATA SHEET

ACCORDING TO REGULATION EU 453/2010 Version 0 date 14 Sept 2019

SECTION 1: Identification of the Substance and of the Company

1.1. Product identifier

- Trade name: **CARBOMED 940EZ**
- Products group: Acrylic Polymers
- Product form: Substance
- Chemical and trade names in widespread use: Polyacrylic Acid; 2-Propenoic Acid, polymer; Carboxyvinyl polymer; Carbomer.
- Description: high molecular weight cross-linked homopolymer of Acrylic Acid.
- EC number (EINECS) : 618-347-7
- CAS number : 9003-01-4
- IUPAC name : 2-Propenoic acid, homopolymer
- INCI name : Carbomer
- Molecular formula : $[C_3H_4O_2]_n$
- Molecular weight : Not applicable
- REACH Registration Number : exempt from Registration

1.2. Relevant identified uses of the substance and uses advised against

1.2.1. Identified Uses:

The product is used mainly for transparent gel production and as a thickening agent in the cosmetic, pharmaceutical, detergents and textile printing industry.

1.2.2. Uses advised against:

All not indicated in section 1.2.1

1.3. Details of the supplier of the Safety Data Sheet

MEDOLLA IBERIA SL
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46004 Valencia – Spain
Phone +34 96113534
info@medollaiberia.com

1.4. Emergency telephone numbers

- - Poisons Control Centre "Niguarda" Ca' Granda Hospital - Milan - Italy: +39 (0)2 66101029 (24 hours/7 days) - 64447053

- National Poisons Information Service - United Kingdom: +44 (0)844 8920111 (24 hours/7 days, health professionals only)



- Clinical Toxicology and Berlin Poison Information Centre, Institute of Toxicology - Berlin - Germany:
+49 (0)30 19240 (24 hours/7 days)

- National Poisons Centre for Prevention and Treatment of Intoxications, "ORFILA" number - France:
+33 (0)1 45425959 (24 hours/7 days)

- National Institute of Toxicology and Forensic Sciences, Toxicological Information Service - Madrid - Spain: +34 (0)91 5620420 (24 hours/7 days)

- Warsaw Poison Information and Control Centre - Warsaw - Poland: +48 (0)22 6196654 (24 hours/7 days)

SECTION 2: Hazards Identification

2.1. Classification of the Substance

2.1.1. Classification according to Regulation (EC) No. 1272/2008 (CLP):

Not Classified.

2.1.2. Classification according to Directive 67/548/EEC:

Not Classified.

2.1.3. Adverse physico-chemical, human health and environmental effects:

No additional information available.

2.2. Label Elements

Labelling according to Regulation (EC) No. 1272/2008 (CLP):

The substance doesn't require a hazard label:

Signal word : Not applicable.

Hazard pictogram : Not applicable.

Hazard statements : Not applicable.

Precautionary statements : Not applicable.

2.3. Other Hazards

Handling of the substance may generate a dust, which can cause mechanical irritation of the eyes, skin, and respiratory tract (nose and throat). Fine dust clouds may also form explosive mixtures with air. Product forms slippery surface when combined with water.

Regarding the results of the PBT and vPvB evaluation according to the criteria of Annex XIII of Regulation (EC) No. 1907/2006 (REACH), see Subsection 12.5..

SECTION 3: Composition / Information on Ingredients

3.1. Substances

CARBOMED 940EZ is a substance .

Constituents:

Name	Product identifier	% weight	Classification GHS
Polyacrylic Acid	CAS number: 9003-01-4 EC number (EINECS): 618-347-7 REACH Registration Number: exempt from Registration	> 98,5	Not classified
Acrylic Acid	EC number (EINECS): 201-177-9 EC index number: 607-061-00-8 REACH Registration Number: 01-2119452449-31-XXXX	≤ 0,1	Flammable Liquids Cat. 3, H226 Acute Toxicity Cat. 4 (Oral), H302 Acute Toxicity Cat. 4 (Dermal), H312 Acute Toxicity Cat. 4 (Inhalation), H332 Skin Corrosion Cat. 1A, H314 Acute Aquatic Toxicity Cat. 1, H400 For the full text of the R-, H- and EUH-phrases, see Section 16.

3.2. Mixtures

Not applicable.

SECTION 4: First Aid Measures

4.1. Description of first aid measures

First aiders protection: the rescuers should pay attention to their own safety, no action shall be taken involving any personal risk or without suitable training.

When providing first aid, always protect yourself against exposure to chemicals or blood born diseases by wearing gloves, masks and eye protection.

After providing first aid, wash exposed skin with soap and water.

Following eye contact: Remove contact lenses, if present and easy to do. Immediately flush eyes with plenty of 1% physiological saline solution (NaCl) for 5 minutes while holding eyelids open. If no saline



is available, flush with plenty of clean water for 15 minutes. Water swells the product into a gelatinous film, which may be difficult to remove from the eye using only water. Seek medical attention if irritation persists.

Following skin contact: rinse immediately with plenty of water, for at least 15 minutes, and with soap. Remove contaminated clothing and shoes. Launder contaminated clothing before reuse. Get medical attention if irritation develops.

Following inhalation: remove exposed person to fresh air if respiratory irritation occurs. If breathing is laboured, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention. Following ingestion: don't give an unconscious person anything to drink. Don't induce vomiting. Rinse mouth with physiological saline solution without swallowing and then wash with water. Consult a doctor.

4.2. Most important symptoms and effects, both acute and delayed

This substance readily absorbs moisture and may become thick and gelatinous upon contact with mucous membranes of the eye or, upon inhalation, into the nasal passages.

Pre-existing skin conditions may be aggravated by prolonged or repeated exposure. Persons with sensitive airways, as asthmatics, may react to powders.

Following eye contact: solid particles (powders) in the eye may cause pain and mechanical irritation.

Following skin contact: contact dermatitis may occur by physical effect 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.

Following inhalation: this substance can cause irritation by physical effect, breathing of dust may cause coughing, mucous production and shortness of breath.

Following ingestion: no ingestion effects known.

4.3. Indication of any immediate medical attention and special treatment needed

Basic first aid and symptomatic treatment (see Subsection 4.1.). No special treatment needed.

SECTION 5: Firefighting Measures

5.1. Extinguishing media

The substance is not flammable under normal use and storage conditions.

Suitable extinguishing media: Carbon Dioxide (CO₂), dry chemical powder, foam, water spray and water fog.

Unsuitable extinguishing media: Carbon Dioxide (CO₂) 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.



5.2. Special hazards arising from the substance

The product, like many organic fine particles in suspension, can form explosive mixtures with air.

For its high resistivity, the substance can accumulate static electricity, which could be then discharged with a spark capable of igniting solvent vapours/air mixtures.

In case of fire, the substance thermal decomposition can release smokes containing Carbon Monoxide, Carbon Dioxide, Aldehydes and other products of incomplete combustion.

5.3. Advice for firefighters

Promptly isolate the area by keeping unnecessary personnel away from the zone affected by the fire.

The firefighters should be equipped with self-contained breathing apparatus with a full face mask operated in positive pressure mode and they should wear suitable protective clothing (including helmets, protective boots and gloves) according to EN 469.

5.4. Additional information

Collect and dispose the fire debris and contaminated extinguishing water, which must not reach the sewerage system, in accordance with current regulations: see Section 13.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Isolate area until complete recovery of the substance and evacuate unnecessary personnel. Avoid raising dust. Remove all ignition sources (open flames, sparks, hot surfaces, ...). Don't smoke.

Avoid product contamination with combustible or incompatible substances.

In confined areas, ensure adequate ventilation.

Avoid breathing dust, protecting the airway with dust masks.

Wear gloves, clothing and Personal Protective Equipment (PPE) suitable to avoid contact with skin and eyes.

Caution: the product is slippery when wet.

6.2. Environmental precautions

Take precautions to prevent that the substance is released into the environment ending up into soil, drains, surface waters or groundwaters.

6.3. Methods and material for containment and cleaning up

Cover drains. Move containers from spill area. Promptly remove any broken packages and re-bag only the product which isn't spilled. Avoid as much as possible dust formation and prevent wind dispersal.



Collect and transfer the spilled substance in suitable cleaned containers properly labelled. If possible, reuse the product, otherwise dispose of through an authorized company in accordance with local/national regulations.

Vacuum up affected area to remove remaining contamination. Use spark-proof tools and explosion-proof equipment.

Wash the last residues with saline solution or detergent in order to avoid slippery film formation on the flooring or on the road, then collect the washings in appropriate containers and contact specialized firms to dispose of according to the procedures provided by law in force.

6.4. Reference to other Sections

Refer to Subsection 7.1.1. for substances incompatible with the product.

For additional information on Exposure Controls and on Personal Protective Equipment, see Section 8.

For Disposal, see Section 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

7.1.1. Specific recommendations on handling:

Operate according to rules of good technique avoiding substance dispersion in the environment and in the workplaces.

Handle in adequately ventilated premises or provide localized aspirations, minimize generation and accumulation of dusts, which must not be inhaled.

Avoid contact with eyes, skin and clothing. Use appropriate PPE and wear suitable protective clothing.

Product can accumulate static electricity when handled, the equipment will have to dissipate charges that may develop, any pneumatic transfer lines should be grounded and electrically conductive; protect electrical equipment and lighting to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.

Substance forms slippery surface if combined with water.

Keep away from heat, sparks, pilot lights, static electricity and open flames.

Heat may be generated if polymer comes in contact with alkaline compounds like Ammonia, Sodium Hydroxide or strong basic Amines: keep away from these incompatible materials.

7.1.2. Advice on general occupational hygiene:

Treat the product in accordance with good industrial hygiene practice:

- strictly observe personal hygiene measures;
- don't eat, drink and smoke during use;
- after use, wash carefully hands and other skin exposed areas with mild soap and water;



- remove contaminated clothing and protective equipment before entering eating areas and when leaving work;
- wash contaminated clothing prior to re-use.

7.2. Conditions for safe storage, including any incompatibilities

Store in a cool, dry and well-ventilated area, limiting as much as possible the exposure to moisture and avoiding the direct sunlight.

Keep containers tightly closed when not in use, the product is hygroscopic.

Keep away from heat or ignition sources, from open flames and from the incompatible substances indicated in Subsection 7.1.1..

Take precautions to avoid release to the environment.

Substance is normally marketed in bags of polyethylene (LDPE), which are further protected from moisture by containers in HDPE or cardboard.

7.3. Specific end use(s)

The product is used mainly for transparent gel production and as a thickening agent in the cosmetic, pharmaceutical, detergents and textile printing industry.

SECTION 8: Exposure Controls / Personal Protection

8.1. Control parameters

Occupational Exposure Limit Values:

The industry-recommended permissible exposure limit for respirable Polyacrylate dusts is 0,05 mg/m³.

8.2. Exposure controls

8.2.1. Appropriate engineering controls:

Work in a well ventilated area and avoid dust formation.

In confined areas, prevent inhalation by providing local exhaust ventilation or effective general ventilation systems, capable of maintaining the particles concentration in air below the recommended limit avoiding also dust accumulation.

If this is still insufficient, use appropriate protective equipment for the airways.

Adopt suitable clothing and PPE to avoid eyes and skin direct contact.

Wash thoroughly hands and other skin areas (arms, face, ...) exposed to the substance after handling, before eating, drinking, smoking or using the lavatory, and at the end of the working period.

Store street clothes and work clothes separately. It's recommended to remove contaminated clothing and to take a shower in case of body contamination.

Routinely wash work clothing to remove substance residues.



Emergency eye wash fountains and sinks should be available in the immediate vicinity of any potential exposure.

8.2.2. Individual protection measures, such as Personal Protective Equipment:

Use PPE conforming to European Norms. In any case consult the supplier before making a final decision.

(a) Eye / face protection:

In case of dust exposure, wear safety glasses with side shields or protective goggles, comply with the EN 166. Avoid contact lenses. Provide the presence of running water and eye wash fountains in the workplaces.

(b) Skin protection:

(i) Hand protection:

In case of prolonged use, if a direct contact with the substance may occur, wear chemically protective gloves according to EN 374; for example, are recommended gloves made of Butyl or Nitrile (NBR) Rubber.

(ii) Body protection:

Wear work clothing sufficient to cover completely the body comply with EN 14605 and safety shoes (S1P or S3).

Wear fire resistant clothing only when it has to fight a fire.

(c) Respiratory protection:

Under normal conditions of use, no respiratory protection is required. In case of dusts exposure, wear a dust protective mask with Filter Type P1, P2 or P3 according to EN 149.

Self-contained breathing apparatus in the event of a fire.

(d) Thermal hazards:

Not applicable.

8.2.3. Environmental exposure controls:

In case of accidental release, proceed as described in Section 6 to contain the spilled and to avoid environmental dispersal (soils and/or surface waters and/or groundwaters).

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

a) Appearance: very fine white powder

b) Odour: slightly acid

c) Odour threshold: no data available

d) pH: 2,5 - 3,5 (at 0,5% water dispersion)

- e) Melting point/freezing point: no data available
- f) Initial boiling point and boiling range: no data available
- g) Flash point: no data available
- h) Evaporation rate: no data available
- i) Flammability (solid, gas): non flammable
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapour pressure: no data available
- l) Vapour density: no data available
- m) Bulk density: 150 - 250 kg/m³
- n) Water solubility: 3 - 4% with gel formation
- o) Other solubilities: partly soluble in polar solvents; insoluble in apolar solvents
- p) n-Octanol/Water partition coefficient: no data available
- q) Autoignition point: > 450 °C
- r) Decomposition temperature: no data available
- s) Viscosity: no data available
- t) Explosive properties: can form explosive mixtures with air
- u) Oxidising properties: non oxidizing

9.2. Other information For further information, refer to the product Technical Data Sheet.

SECTION 10: Stability and Reactivity

10.1. Reactivity

Under normal conditions of use and storage, significant reactions will not occur.

10.2. Chemical stability

The product doesn't form peroxides, not polymerize and, more generally, is normally stable also at moderately elevated temperatures and pressures.

10.3. Possibility of hazardous reactions

Fine dust clouds may form explosive mixtures with air.

The product may yield strong reactions if it comes wrongly in contact with the incompatible substances already listed in Subsection 7.1.1..



10.4. Conditions to avoid

Protect the product from moisture, which compromise its qualitative characteristics.

When handling the substance, avoid formation and accumulation of dust, as well as wind dispersal.

Avoid the contact with the incompatible compounds already listed in Subsection 7.1.1.; protect from heating and from exposure to ignition sources like hot surfaces, sparks and open flames.

10.5. Incompatible materials

The product can react exothermically with the incompatible compounds already mentioned above in Subsection 7.1.1..

10.6. Hazardous decomposition products

The polymer is chemically stable, under normal conditions of storage and use aren't generated hazardous decomposition products.

The thermal decomposition of substance can release smokes containing Carbon Monoxide, Carbon Dioxide, Aldehydes and other products of incomplete combustion.

SECTION 11: Toxicological Information

11.1. Information on toxicological effects

(a) Acute toxicity : Not Classified

LD50 oral rat > 2500 mg/kg bw

LD50 oral mouse > 4600 mg/kg bw

LD50 dermal rabbit > 5000 mg/kg bw

(Based on data from components or similar substances)

Inhalation: animal studies indicate that the inhalation of respirable Polyacrylate dusts may cause inflammatory changes in the lung.

(b) Skin corrosion/irritation : Not Classified The product is not expected to be a primary skin irritant, based on data from components or similar substances. In sensitive individuals, the contact with damaged skin can cause irritation by physical effect.

(c) Serious eye damage/irritation : Not Classified The product particulates may cause irritation by mechanical action.

(d) Respiratory or skin sensitization : Not Classified. There is no data available that indicate the product as a sensitizing agent for the respiratory tract or for the skin.

(e) Germ cell mutagenicity : Not Classified

(f) Carcinogenicity : Not Classified

(g) Reproductive toxicity : Not Classified



(h) Specific Target Organ Toxicity (STOT)

- single exposure (SE) : Not Classified

(i) Specific Target Organ Toxicity (STOT)

- repeated exposure (RE) : Not Classified. Adverse effects have been observed on the lungs in rats exposed by inhalation to a respirable Polyacrylate dust for the entire duration of their life. These effects included: inflammation, hyperplasia, fibrosis and alveolar anomalies.

(j) Aspiration hazard : Not Classified

SECTION 12: Ecological Information

12.1. Toxicity

The substance is considered of low toxicity.

Toxicity to fish: The acute LC50 is 100 - 1000 mg/l based on component data:LC50 (96 h) *Lepomis macrochirus* = 580 mg/l (Freshwater)

Toxicity to aquatic invertebrates: The acute EC50 is 100 - 1000 mg/l based on component data:EC50 (96 h) *Daphnia magna* = 168 mg/l (Freshwater)

Chronic effects expected at 100 - 1000 mg/l based on component data.

Toxicity to algae and aquatic plants:

The acute EC50 is 10 - 100 mg/l (Algae) based on component data.

Toxicity to bacteria and to microorganisms in sewage treatment plants:

The acute EC50 is 100 - 1000 mg/l (Bacteria) based on component data.

12.2. Persistence and degradability

At least 25% of the components show limited biodegradation, based on OECD 301 and 302 - type test data.

12.3. Bioaccumulative potential

Less than 1% of the components show potential to bioconcentrate, based on measured n-Octanol/Water partition coefficients.

Therefore, the substance is NOT bioaccumulative (not B) and NOT very bioaccumulative (not vB).

12.4. Mobility in soil

No additional information available.



12.5. Results of PBT and vPvB assessment

On the basis of available data on toxicity, degradation and bioaccumulation, it can be stated that the product does NOT fulfil the PBT criteria (not PBT) and NOT the vPvB criteria (not vPvB).

12.6. Other adverse effects

None known.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

The surpluses or the residues of the product should be handled observing the precautions described in Subsection 7.1. and, in case, using the PPEs indicated in Subsection 8.2..

The generation of waste should be avoided or at least minimized, as much as possible recover the substance to reuse; incineration, preferable, or landfill should only be considered when recycling is not feasible.

The wastes treatment methods must be evaluated on a case by case basis, depending on their composition; confer to authorized disposal plants, according to the provisions of community and national legislation in force and, in particular, with the requirements of Directive 2008/98/EC.

Contaminated packaging disposal: before to confer them to a specialized company for recycling, incineration or landfill, the containers must be washed thoroughly with water which must then be sent to the recovery or to a treatment plant. Packaging that cannot be cleaned must be disposed of as the substance.

It's suggested below an EWC - code for disposal, as Hazardous Special Wastes, of the residues resulting from use of the product: this code is provided only for guidance, based on the characteristics of the substance and its intended uses.

The responsibility for the attribution of the correct code is only of the final user, according to several factors, including the actual use, the sector of business and of use, the possible contaminations or alterations, etc ...:

07 01 08*: wastes from the manufacture, formulation, supply and use of basic organic chemicals - Other still bottoms and reaction residues

with hazardous properties of waste:

H4 "Irritant": non-corrosive substances and preparations which, through immediate, prolonged or repeated contact with the skin or mucous membrane, can cause inflammation;

H5 "Harmful": substances and preparations which, if they are inhaled or ingested or if they penetrate the skin, may involve limited health risks.



SECTION 14: Transport Information

The substance is not classified as dangerous goods under regulations on land transport (ADR/RID), on inland waterways transport (ADN) and on sea transport (IMO - IMDG Code), nor is subject to provisions for air transport (ICAO - TI/IATA - DGR).

14.1. Land transport (ADR/RID)

Not regulated.

14.2. Inland waterways transport (ADN)

Not regulated.

14.3. Sea transport (IMO - IMDG Code)

Not regulated.

14.4. Air transport (ICAO - TI/IATA - DGR)

Not regulated.

14.5. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: Regulatory Information

15.1. Safety, health and environmental regulations and legislation specific for the substance

The legislative references list is indicative and not exhaustive. The product user is required to investigate in each case the regulations and the recommendations for substance proper use referred to in this Safety Data Sheet.

- Regulation (EC) No. 1907/2006 of 18 December 2006 (Concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)) and its subsequent amendments and/or integrations, including particularly the Regulation (EU) No. 453/2010 of 20 May 2010 (Amending REACH Annex II that sets out the requirements for the compilation of the Safety Data Sheets) with its subsequent amendments and/or integrations;
- Directive 67/548/EEC of 27 June 1967 (On the approximation of laws, regulations and administrative provisions relating to the Classification, Packaging and Labelling of dangerous substances) and its subsequent amendments and/or integrations;
- Regulation (EC) No. 1272/2008 of 16 December 2008 (Classification, Labelling and Packaging of substances and mixtures (CLP); amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006) and its subsequent amendments and/or integrations;
- Directive 2008/68/EC of 24 September 2008 (On the inland transport of dangerous goods, implementation of provisions incorporated into the ADR, RID and ADN) and its subsequent amendments and/or integrations;



- Directive 91/322/EEC of 29 May 1991 (On establishing indicative limit values for occupational exposure) and its subsequent amendments and/or integrations;
- Directive 98/24/EC of 7 April 1998 (On the protection of the health and safety of workers from the risks related to chemical agents at work) and its subsequent amendments and/or integrations, with, for its implementation, the Directives 2000/39/EC of 8 June 2000, 2006/15/EC of 7 February 2006 and 2009/161/EU of 17 December 2009 (Three lists of indicative occupational exposure limit values);
- Directive 2008/98/EC of 19 November 2008 (On waste; repealing Directives 75/439/EEC of 16 June 1975, 91/689/EEC of 12 December 1991 and 2006/12/EC of 5 April 2006) and its subsequent amendments and/or integrations.

According to current provisions under the Regulation (EC) No. 1907/2006 (REACH), the product isn't part of Substances of Very High Concern (SVHC) candidate for Authorisation or already subject to Authorisation under Title VII (it has not been included in Annex XIV) and it isn't among the substances subject to Restrictions on the manufacturing, placing on the market or use under Title VIII (it has not been included in Annex XVII).

15.2. Chemical Safety Assessment

For this substance has not been carried out a Chemical Safety Assessment.

SECTION 16: Other Information

16.1. Revision and changes from previous version of the Safety Data Sheet

First Issue Date : 14/09/2019

Previous Version : Not applicable

Latest Version : Version No. 0, Revision No. 0, 14/09/2019

This Material Safety Data Sheet substitutes and cancels any Previous Version.

This Sheet contains changes from the Previous Version: Not applicable

16.2. Key and legend to abbreviations and acronyms used

ADN: Accord européen relatif au transport international des marchandises Dangereuses par voies de Navigation intérieures (European agreement concerning the international carriage of dangerous goods by inland waterways)

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (European agreement concerning the international carriage of dangerous goods by road)

bw: body weight

CAS: Chemical Abstract Service number

CLP: Classification, Labelling and Packaging; acronym used to refer to Regulation (EC) No. 1272/2008

EC: European Community



EC50: Effective Concentration 50%, the median effective concentration required to induce a 50% effect (The effective concentration of substance that causes 50% of the maximum response, i.e. the statistically derived concentration of a toxicant that can be expected to cause a defined non-lethal effect in 50% of a given population of organisms under defined conditions)

ECHA: European Chemicals Agency

EEC: European Economic Community

EINECS: European Inventory of Existing Commercial Chemical Substances

EN: European Norm

EU: European Union

EUH (statement): CLP - specific Hazard statement

EWC (code): European Waste Catalogue Code

HDPE: High Density PolyEthylene

IATA - DGR: International Air Transport Association - Dangerous Goods Regulations

IBC (code): International Bulk Chemical (code) (International code for the construction and equipment of ships carrying dangerous Chemicals in Bulk)

ICAO - TI: International Civil Aviation Organization - Technical Instructions for the safe transport of dangerous goods by air

IMO - IMDG (code): International Maritime Organization - International Maritime Dangerous Goods (code)

INCI: International Nomenclature of Cosmetic Ingredients

IUPAC: International Union of Pure and Applied Chemistry

LC50: Lethal Concentration 50%, median lethal concentration (Concentration of a tested substance causing 50% lethality during a specified time interval)

LD50: Lethal Dose 50%, median lethal dose (Dose of a tested substance causing 50% lethality during a specified time interval: is the measure generally used when exposure is by swallowing, through skin contact or by injection)

LDPE: Low Density PolyEthylene

MARPOL 73/78: MARitime POLLution (International convention for the prevention of pollution from ships, 1973 as modified by the protocol of 1978)

MSDS: Material Safety Data Sheet

NBR (or nitrile rubber): Nitrile Butadiene Rubber (Synthetic rubber copolymer of acrylonitrile and butadiene)

OECD: Organization for Economic Co-operation and Development



PBT: Persistent, Bioaccumulative and Toxic (substance)

PPE: Personal Protective Equipment

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals; acronym used to refer to Regulation (EC) No. 1907/2006

RID: Règlement International concernant le transport des marchandises Dangereuses par chemin de fer (Regulations concerning the International carriage of Dangerous goods by rail)

STOT: Specific Target Organ Toxicity

(STOT) RE: Repeated Exposure

(STOT) SE: Single Exposure

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative (substance)

16.3. Key literature references and sources for data

- Guidance on the compilation of Safety Data Sheets (ECHA, Version 1.1, December 2011)
- ADN - List of Dangerous Goods (2011)
- ADR - Dangerous Goods List (2013)
- ICAO - Dangerous Goods List (2006)
- IMO - Dangerous Goods List (2010)

16.4. List of relevant Risk Phrases (R-Phrases), Hazard Statements (H-phrases), Safety Phrases (S-Phrases) and Precautionary Statements (P-Phrases): number and full text

16.4.1. Polyacrylic Acid (CAS No.: 9003-01-4):

Directive 67/548/EEC:

R-Phrases:

Not applicable.

Regulation (EC) No. 1272/2008:

H-Phrases:

Not applicable.

16.4.2. Acrylic Acid (CAS No.: 79-10-7):

Regulation (EC) No. 1272/2008:

H-Phrases:

H226: Flammable liquid and vapour.



H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H314: Causes severe skin burns and eye damage.

H332: Harmful if inhaled.

H400: Very toxic to aquatic life.

16.5. Appropriate training for workers to ensure protection of human health and of the environment

Employees who handle this product must receive adequate training to recruitment or to change of duty and regular updates.

The training must include: information on the potential health and environment hazards of the substance and on symptoms of exposure; a description of the operations in the work area where the product is present and of the suitable modes of storage; an explanation of safe work practices and a demonstration of correct use of personal protective equipment (PPE); an illustration of the procedures to follow in the event of fire, spills or emergencies, with proper training.

The MSDS is an excellent tool for training employees and a copy should always be kept in the work area where the substance is being used.

This Safety Data Sheet has been revised in all its Sections in accordance with Regulation (EU) No. 453/2010. All subsequent updates will be characterized by appropriate markers.

The data and information reported are based on our best knowledge and experience available at the compilation date, they refer solely to the substance at issue and describe it only with regard to safety requirements.

This product should be stored, handled and used according to the standards of hygiene, safety and good industry practice and in compliance with existing laws and legislations.

The user is obliged to assure himself of the appropriateness and completeness of the information in relation to the specific use intended to do.

The company MEDOLLA IBERIA . does not take any responsibility for damage to people or things caused by the wrong use of the information of this Sheet.