

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

1. Identification of the substance/mixture and company

Trade name: Polyquaternium-7
I.N.C.I. Polyquaternium-7
Utilization: Cationic products, conditioners
Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania
Tel/Fax: +40259-436.755, www.ellemental.com
Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.
International emergency number: +49 180 2273-112

2. Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

According to Regulation (EC) No 1272/2008 [CLP]

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

Hazard Statement:

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P273 Avoid release to the environment.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste collection point.

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered. Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

3. Declaration of ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Aqueous solution based on: 2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide

Regulatory relevant ingredients

2-Propen-1-aminium, N,N-dimethyl-N-2-propenyl-, chloride, polymer with 2-propenamide (MW=4.3-5.2 Mio)

Content (W/W): >= 5 % - <= 10 % Aquatic Chronic 2

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

CAS Number: 26590-05-6

H411

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

4. First aid measures

4.1. Description of first aid measures

If adverse health effects develop seek medical attention.

If inhaled:

not relevant.

On skin contact:

After contact with skin, wash immediately with plenty of water.

On contact with eyes:

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek medical attention.

On ingestion:

Rinse mouth and then drink 200-300 ml of water

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

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Hazards: No hazard is expected under intended use and appropriate handling.

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

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire fighting measures

5.1. Extinguishing media

Suitable extinguishing media:

water spray, carbon dioxide, dry powder, foam

Unsuitable extinguishing media for safety reasons: water jet

5.2. Special hazards arising from the substance or mixture

Endangering substances: harmful vapours

Advice: Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

5.3. Advice for fire-fighters

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

For large amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder).

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Protection against fire and explosion:

Avoid open flames.

7.2. Conditions for safe storage, including any incompatibilities

Suitable materials for containers: High density polyethylene (HDPE)

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:

Storage temperature: $\leq 30^{\circ}\text{C}$

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure controls / personal protection

8.1. Control parameters

Components with occupational exposure limits

7681-57-4: sodium metabisulphite

8.2. Exposure controls

Appropriate engineering controls

No special precautions necessary.

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

Hand protection:

Suitable are protective gloves with the following specification. The recommendation is valid for laboratory conditions, specific workplace conditions must be taken into consideration separately.

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

nitrile rubber (NBR) - 0.2 mm coating thickness

Eye protection:

Safety glasses

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

Do not discharge product into the environment without control.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

State of matter: liquid

Form: liquid, viscous

Colour: colourless to yellowish

Odour: characteristic

Odour threshold: not applicable

Flammability: not flammable

Flammability of Aerosol Products: not applicable, the product does not form flammable aerosoles

Lower explosion limit:

For liquids not relevant for classification and labelling.

Upper explosion limit:

For liquids not relevant for classification and labelling.

Flash point: > 101 °C

Auto-ignition temperature: not applicable

Thermal decomposition: No decomposition if stored and handled as prescribed/indicated.

pH value: 3.3 - 4.5 (water, 20 °C) (DIN EN 1262)

Viscosity, kinematic: not determined

Viscosity, dynamic: 7,500 - 15,000 mPa*s (25.0 °C)(DIN EN ISO 2555)

Solubility in water: readily soluble

Solubility (qualitative) solvent(s): distilled water readily soluble

Partitioning coefficient n-octanol/water (log Kow): not determined

Vapour pressure: not determined

Density: 1.025 g/cm³(20 °C)

Relative vapour density (air): not applicable

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: not explosive

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

Oxidizing properties

Fire promoting properties: not fire-propagating

Other safety characteristics

Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.

No further information available.

Evaporation rate:

Value can be approximated from Henry's Law Constant or vapor pressure.

10. Stability and reactivity

10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

None if used for intended purpose.

10.4. Conditions to avoid

See SDS section 7 - Handling and storage.

10.5. Incompatible materials

Substances to avoid:

No substances known that should be avoided.

10.6. Hazardous decomposition products

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion.

Experimental/calculated data:

LD50 (oral): > 5.000 mg/kg

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

Respiratory/Skin sensitization

Assessment of sensitization:

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

There is no evidence of a skin-sensitizing potential.

Germ cell mutagenicity

Assessment of mutagenicity:

The chemical structure does not suggest a specific alert for such an effect.

Experimental/calculated data:

Ames-test

Bacteria: negative (OECD Guideline 471)

Carcinogenicity

Assessment of carcinogenicity:

The chemical structure does not suggest a specific alert for such an effect.

Reproductive toxicity

Assessment of reproduction toxicity:

The chemical structure does not suggest a specific alert for such an effect.

Developmental toxicity

Assessment of teratogenicity:

No data was available concerning toxicity to development.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on available data, the classification criteria are not met.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

No adverse effects were observed after repeated exposure in animal studies.

Aspiration hazard

No aspiration hazard expected.

Interactive effects

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

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Other information

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. Ecological information

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

12.1. Toxicity

Assessment of aquatic toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Toxicity to fish:

LC50 > 10 - 100 mg/l, various species

Microorganisms/Effect on activated sludge:

EC0 > 10 - 100 mg/l, Pseudomonas putida

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):

Poorly biodegradable.

12.3. Bioaccumulative potential

Assessment bioaccumulation potential:

No data available.

12.4. Mobility in soil

Assessment transport between environmental compartments:

Volatility: not applicable

12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

12.6. Endocrine disrupting properties

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12.7. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

13. Disposal considerations

13.1. Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.

14..Transport information

Land transport

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

ADR

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

RID

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user None known

14.1. UN number or ID number

See corresponding entries for "UN number or ID number" for the respective regulations in the tables above.

14.2. UN proper shipping name

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

14.3. Transport hazard class(es)

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

14.4. Packing group

See corresponding entries for "Packing group" for the respective regulations in the tables above.

14.5. Environmental hazards

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

14.6. Special precautions for user

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory information

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

Prohibitions, Restrictions and Authorizations
Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3, 75

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
Listed in above regulation: no

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

16. Additional information

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Aquatic Chronic Hazardous to the aquatic environment - chronic

Material safety data sheet

According to EU Regulation 1907/2006 in the current version

POLYQUATERNIUM-7

H412 Harmful to aquatic life with long lasting effects.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

Disclaimer:

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.