

Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 12.01.2010

Version: 1.2

Product: **Luviquat® FC 550**

(30035096/SDS_COS_EU/EN)

Date of print 13.01.2010

1. Identification of the substance/mixture and of the company/undertaking

Luviquat® FC 550

Use: cosmetic ingredient

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Care Chemicals

Telephone: +49 621 60-48434

Telefax number: +49 621 60 66-48434

E-mail address: EM-Masterdata@basf.com

Emergency information:

International emergency number:

Telephone: +49 180 2273-112

2. Hazards Identification

According to REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Label elements and precautionary statement:

Pictogram:



Signal Word:

Warning

Hazard Statement:

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

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Precautionary Statements (Prevention):

|| Avoid release to the environment.

Precautionary Statements (Response):

|| Collect spillage.

Precautionary Statements (Disposal):

|| Dispose of contents/container to hazardous or special waste collection point.

Classification of the substance and mixture:

|| Acute hazards to the aquatic environment: Cat. 1

|| Chronic hazards to the aquatic environment: Cat. 1

Possible Hazards (according to Directive 67/548/EWG or 1999/45/EC)

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

3. Composition/Information on Ingredients

Chemical nature

INCI Name: Polyquaternium-16

Preparation based on: 1H-Imidazolium, 1-ethenyl-3-methyl-, chloride, polymer with 1-ethenyl-2-pyrrolidinone (Content (W/W): 40 %), water (Content (W/W): 60 %)

CAS: 95144-24-4

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink plenty of water.

Note to physician:

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Suitable extinguishing media:
water, carbon dioxide, foam, dry extinguishing media

Special protective equipment:
Wear a self-contained breathing apparatus.

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

6. Accidental Release Measures

Personal precautions:
No special precautions necessary.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:
For large amounts: Dike spillage. Pump off product.
For residues: Pick up with suitable absorbent material.
Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Handling

Handle in accordance with good industrial hygiene and safety practice.

Storage

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

8. Exposure Controls/Personal Protection

Personal protective equipment

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and other
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	liquid
Colour:	clear yellowish
Odour:	faint specific odour
pH value:	7.0
Boiling point:	100 °C (1,013 mbar)
Flash point:	> 100 °C
Vapour pressure:	23 hPa (20 °C) 123 hPa (50 °C)
Density:	approx. 1.1 g/cm ³ (20 °C)
Solubility in water:	miscible
Solubility (qualitative) solvent(s):	organic solvents soluble
Viscosity, dynamic:	approx. 2,500 mPa.s (25 °C)

10. Stability and Reactivity

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

Hazardous reactions:

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

Hazardous decomposition products:

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

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 5,000 mg/kg (BASF-Test)

LC50 rat (by inhalation): > 5.1 mg/l 4 h (OECD Guideline 403)

LD50 rat (dermal): > 2,000 mg/kg (BASF-Test)

Irritation

Assessment of irritating effects:

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

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (Draize test)

Serious eyes damages/irritation rabbit: non-irritant (Draize test)

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Experimental/calculated data:

Guinea pig maximization test guinea pig: Non-sensitizing. (OECD Guideline 406)

Germ cell mutagenicity

Assessment of mutagenicity:

No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in studies with mammals.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

Very toxic (acute effect) to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) 0.7 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)

The details of the toxic effect relate to the nominal concentration.

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Aquatic invertebrates:EC50 (48 h) 17.7 mg/l, *Daphnia magna* (OECD Guideline 202, part 1, static)

The details of the toxic effect relate to the nominal concentration.

Aquatic plants:EC50 (72 h) 0.32 mg/l (biomass), *Desmodesmus subspicatus* (OECD Guideline 201, static)

The details of the toxic effect relate to the nominal concentration.

Microorganisms/Effect on activated sludge:EC10 (17 h) 0.68 mg/l, *Pseudomonas putida* (DIN 38412 Part 8, aerobic)

The details of the toxic effect relate to the nominal concentration.

EC20 > 1,000 mg/l, activated sludge (DIN EN ISO 8192, aerobic)

Persistence and degradability**Assessment biodegradation and elimination (H₂O):**

Not readily biodegradable (by OECD criteria). Poorly biodegradable. Moderately/partially eliminated from water. The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge.

Elimination information:

20 - 70 % DOC reduction (OECD Guideline 302 B) (aerobic, activated sludge)

Bioaccumulation potential**Bioaccumulation potential:**

Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected. The product has not been tested. The statement has been derived from the structure of the product.

13. Disposal Considerations

Observe national and local legal requirements.

14. Transport Information**Land transport**

ADR

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains COPOLYMER OF VINYLIMIDAZOLIUMMETHOCHLORIDE AND VINYLPIRROLIDONE)

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RID

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains COPOLYMER OF VINYLIMIDAZOLIUMMETHOCHLORIDE AND VINYLPIRROLIDONE)

Inland waterway transport**ADNR**

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains COPOLYMER OF VINYLIMIDAZOLIUMMETHOCHLORIDE AND VINYLPIRROLIDONE)

Sea transport**IMDG**

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Marine pollutant: YES
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains COPOLYMER OF VINYLIMIDAZOLIUMMETHOCHLORIDE AND VINYLPIRROLIDONE)

Air transport**IATA/ICAO**

Hazard class: 9
Packing group: III
ID number: UN 3082
Hazard label: 9, EHS
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(contains COPOLYMER OF VINYLIMIDAZOLIUMMETHOCHLORIDE AND VINYLPIRROLIDONE)

15. Regulatory Information

Regulations of the European union (Labelling) / National legislation/Regulations

Directive 1999/45/EC ('Preparation Directive'):

Hazard symbol(s)

N Dangerous for the environment.

R-phrase(s)

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Other regulations

16. Other Information

Vertical lines in the left hand margin indicate an amendment from the previous version.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.