

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

Trade name: Dandruff-Clear™

Identification of the substance or preparation:

Hexamidine diisethionate (EU number: 211-533-5; CAS: 659-40-5)

Usage:

Dandruff-Clear™, a polyvalent anti-microbial ingredient, is recommended as a preservative for cosmetics, as well as an antiseptic agent for oily skin and hair and in deodorants.

2. Hazards identification

Special hazards to man and environment according to (EC) 1272/2008:

Signal word:

Warning

Hazard statement:

H302 - Harmful if swallowed.

H319 - Causes serious eye irritation.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statement:

P262 - Do not get in eyes, on skin, or on clothing.

P280e - Wear eye protection/face protection.

P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to remove. Continue rinsing.

P273 - Avoid release to the environment.

3. Composition/information on ingredients

General chemical description:

Hexamidine diisethionate (EU number: 211-533-5; CAS: 659-40-5) 100%

4. First aid measures

After inhalation:

Move to fresh air.

After skin contact:

Rinse with water. Take off all clothing contaminated by the product.

After eye contact:

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

After ingestion:

Seek medical advice immediately and show this container or label.

5. Fire fighting measures

Suitable extinguishing media:

foam , extinguishing powder, carbon dioxide
water spray jet

Special protection equipment for firefighters:

Wear full protective clothing.
Wear self-contained breathing apparatus.

Combustion products or gases to be formed:

nitrogen oxides, Sulphur oxides

6. Accidental release measures

Personal precautions:

dust mask
Avoid contact with skin and eyes.

Environmental precautions:

Do not empty into drains / surface water / ground water.

Methods for cleaning and take-up:

Remove mechanically. Rinse away residue with plenty of water.

7. Handling and storage

Handling:

Ensure good ventilation/suction at the workplace.

Take measures to prevent the build-up of electrostatic charges.

8. Exposure controls/personal protection

Additional information for system design:

If dust formation caused by handling cannot be avoided Staubex equipment for plants may be necessary.

Ensure good ventilation/suction at the workplace.

Components with specific control parameters for workplace:

Attention: general dust limit value 6 mg/m³ (fine dust concentration)

Respiratory protection:

dust mask

Hand protection:

Suitable protective gloves, for example from KCL GmbH, D-36124 Eichenzell, Germany, E-mail: vertrieb@kcl.de, should comply with the following specification (tested according to EN 374). Specific

workplace conditions must be taken into consideration separately.

Recommended protective gloves Material / coating thickness	Breakthrough time	Remark
Nitrile / 0,1 mm	Level 6 > 480 min.	In case of full contact

Eye protection:

Protective goggles

Skin protection:

protective suit

9. Physical and chemical properties

Designation

Value

Testing for

Safety Data Sheet according to (EC) No 1907/2006

Delivery state:	Powder	
State:	powdery	
Odor:	little intrinsic odour	
Color(s):	white	
pH-value	4 - 8	no information
(20 °C; Solvent: Weight%)		
Melting point	215 °C	no information
Solubility (qualitative)	partially soluble	no information
(20 °C; Solvent: Water)		
Solubility (qualitative)	largely soluble	no information
(100 °C; Solvent: Water)		
Solubility (qualitative)	Insoluble	no information
(Solvent: Acetone, chloroform)		

10. Stability and reactivity

Conditions to avoid:

Avoid radical forming substances (metal-ions, peroxides).

Materials to avoid:

Reaction with oxidants.

Hazardous decomposition products:

None known

No decomposition if used according to specifications.

11. Toxicological information

Acute oral toxicity:

LD50 > 300 - <= 2000 mg/kg body weight

GHS: Category 4

Skin irritation:

not irritating

GHS: No category

Eye irritation:

irritating

GHS: Category 2A

12. Ecological information

Acute invertebrate toxicity:

EC50 > 1 - <= 10 mg product/l.

GHS: Category 2

Ultimate biodegradation:

The total of the organic components contained in the product achieve values below 60% BOD/COD or CO₂ liberation, or below 70% DOC reduction in tests for ease of degradability. Threshold values for 'readily degradable' (e.g. to OECD method 301) are not reached.

GHS: Category 2

13. Disposal considerations

Product disposal:

Waste incineration with the approval of the responsible local authority.

14. Transport information

Road transport ADR:

Class: 9 Packaging group: III

Classification code: M7

Hazard ident. number: 90

UN no.: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Hexamidine diisethionate)

Label: 9

Tunnelcode: (E)

Railroad transport RID:

Class: 9 Packaging group: III

Classification code: M7

Hazard ident. number: 90

Safety Data Sheet according to (EC) No 1907/2006

UN no.: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Hexamidine diisethionate)
Label: 9

Inland water transport ADN:

Class: 9 Packaging group: III
Classification code: M7
Hazard ident. number:

UN no.: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Hexamidine diisethionate)

Label: 9

Marine transport IMDG:

Class: 9 Packaging group: III
EmS: F-A, S-F

Seawater pollutant: marine pollutant

UN no.: 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,
SOLID, N.O.S. (Hexamidine diisethionate)

Label: 9

Air transport IATA:

Class: 9 Packaging group: III
Packaging instructions (cargo): 956

Packaging instructions (passenger): 956

UN no.: 3077 Environmentally hazardous substance, solid, n.o.s.
(Hexamidine diisethionate)

Label: 9

15. Regulatory information

The labeling of the product is indicated in Section 2

16. Other information

Further information:

Inform users about precautionary measures and give them individual protection equipment. This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.