

Date of issue: 01.09.2004 Replaces Data Sheet of : ---

"\*" alterations as compared to previous version; n.ap. = not applicable; n.av. = not available

Creto® Europe Ltd.  
Deutschland**1 Identification of Substance / Preparation and Company****1.1 Identification of Substance or Preparation**

Trade Name : Creto® TS

Article No. : n.av.

Preparation No. : n.av.

**1.2 Use of the substance / preparation:**

Chemical Industry, Paperindustry, Detergentindustry

**1.3 Company / Supplier Identification****1.3.1 Address of the Company / Supplier:**

Creto Europe Ltd. Deutschland, Industriestraße 15, D- 37688 Beverungen

Telephone : +49-5273-21312, Fax : +49-5273-1602

**1.3.2 Responsible :**

Chemie &amp; Vorschrift, Kannheideweg 35, D-53123 Bonn-Duisdorf

**1.4 Emergency - Telephone**

Information Centre Specialising in Symptoms of Poisoning

Telephone : ++49 - 761 - 19 240

Emergency - Telephone of Company / Undertaking

Telephone : +49-5273-21312

**2 Composition / Information on Ingredients****2.1 Chemical Characterisation:**

Aqueous Sodiumsilicate solution

**2.2 Dangerous Ingredients:**

CAS - No.	Index - No.	EEC - No.	Material	m% - range	Symbol	R - phrases
1344-09-8	n.av.	215-687-4	Silicic acid, sodium salt	25 - 35%	n.ap.	n.ap.
31795-24-1	n.av.	250-807-9	Potassium methylsilanetriolate	1 - 5%	n.ap.	n.ap.

Remarks: Classification and labelling of a product is indicated under item 15.

**3 Hazards Identification****3.1 For Humans (additional information is given under item 11) :**

May cause skin and eye irritation.

**3.2 For the Environment :**

Product may soil public waters by increasing pH.

**3.3 For Materials:**

Materials should be tested for resistance.

Corrosive to metals. In aqueous solution, evolves hydrogen with metals.

**4 First Aid Measures****4.1 Inhalation:**

After inhalation of product / fumes of fire leave contaminated area and provide for fresh air.

**4.2 Skin Contact :**

Wash off immediately with large amounts of water.

If symptoms persist, consult physician.

**4.3 Eye Contact :**

Flush eyes out immediately with large amounts of water with eye lids lifted.

Summon a doctor immediately.

**4.4 Ingestion :**

Rinse mouth out and drink plenty of water. Do not cause vomiting.

Summon a doctor immediately.

**4.5 Note to Physician:**

Risk of stomach perforation.

**4.6 Special Equipment:**

None.

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## 5 Fire Fighting Measures

5.1 **Suitable Extinguishing Media :** Foam, dry chemicals, CO<sub>2</sub>.

5.2 **Extinguishing Media to Avoid :** None.

5.3 **Fire and Explosion Hazards :**

In case of fire, product may form: inorganic dust

5.4 **Additional Information :** This material is not combustible; use extinguishing media appropriate for surrounding fire.

5.5 **Special Protective Equipment :**

Wear positive pressure self-contained breathing apparatus.

Wear full protective clothing.

## 6 Accidental Release Measures

6.1 **Personal Precautions :**

See No. 8.3 Personal Protective Equipment.

6.2 **Environmental Precautions and Methods for Cleaning up :**

Do not allow to enter drainage / surface-water / ground-water. Inform responsible authorities after accidental conduction of larger quantities.

6.3 **Further Information :** Take up with absorbent material (e.g. sand, sawdust, general-purpose binder). Send in suitable containers for recovery or disposal.

## 7 Handling and Storage (For national regulations refer to item 15.2)

7.1 **Handling**

7.1.1 **Precautions for Safe Handling :**

Avoid contact with eyes and skin. Provide sufficient ventilation. Keep container tightly closed. Close container straight after use or if empty.

7.1.2 **Precautions in Case of Fire and Explosion :**

The product is not combustible

7.2 **Storage**

7.2.1 **Storage Instructions :**

Floor must be resistant against lyes Keep eyewash bottle ready.

7.2.2 **Store away from :**

Store away from acids. oxidizers.

7.2.3 **Further Information on Storage Conditions :**

Protect from freezing. Provide sufficient ventilation.

7.2.4 **Storage Class :** 8 (VCI - Concept)

## 8 Exposure Controls and Personal Protection

8.1 **Information on System Design :**

Provide for sufficient exhaustion. Provide personal protective equipment.

8.2 **Exposure Limits:**

8.2.1 **Material**

Silicic acid, sodium salt

**Limit Value :**

TLV 6 mg / m<sup>3</sup> (respirable fraction)

8.3 **Personal Protective Equipment**

8.3.1 **General Protection and Hygiene :**

Avoid contact with eyes and skin. Do not inhale gases / vapours / aerosols. When using do not eat, drink or smoke. Remove contaminated, saturated clothing immediately. Wash hands before breaks and after work.

8.3.2 **Respiratory Protection :** Breathing apparatus in the event of aerosol or mist formation.

8.3.3 **Hand Protection :** Gloves (alkali-resistant) (NBR, permeation time > 8h)

8.3.4 **Eye Protection :** Tightly fitting goggles

8.3.5 **Skin Protection :** Lye-resistant protective clothing.

8.3.6 **Further Information :** Refer to special restrictions in wearing protective equipment

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9.2.1 pH-value, undiluted : &lt; 11,4, pH-value, 1% aqueous solution : n.av.

9.2.2 Boiling point / Boiling - range (°C) : ~ 100, Melting point / Melting range (°C) : n.av.

9.2.3 Flash point (°C, c.c.) : n.ap.

9.2.4 Flammability (EEC A10/A13) : n.ap.

9.2.5 Ignition temperature (°C) : n.ap.

9.2.6 Autoflammability (EEC A16) : No.

9.2.7 Oxidising properties : No.

9.2.8 Explosion hazard : No.

9.2.9 Explosion limits (Vol.%) lower : n.ap., upper : n.ap.

9.2.10 Vapour pressure : n.av.

9.2.11 Density (g/ml) : 1,2 - 1,4

9.2.12 Solubility (in Water) : miscible

9.2.13 Partition coefficient, n-Octanol/Water : n.av.

9.2.14 Viscosity : 20 - 400 mPa\*s (20°C)

9.2.15 Solvent separation test : n.ap.

9.2.16 Solvent content (m %) : n.ap.

**9.3 Further Data**

9.3.1 Thermal decomposition (°C) : n.av.

9.3.2 Vapour density (Air = 1) : n.av.

9.3.3 Evaporation rate : n.av.

**10 Stability and Reactivity****10.1 Conditions to Avoid :**

Stable at normal temperature.

**10.2 Materials to Avoid :**

Reactions with acids. In aqueous solution, evolves hydrogen with metals.

**10.3 Hazardous Decomposition Products :**

No dangerous decomposition products when properly handled.

**10.4 Further Information :**

None.

**11 Toxicological Information****11.1 Toxicological Tests :****11.1.1 Acute Health Effects :**Inhalation, LC<sub>50</sub> rat, (mg/l/4h) : n.av.Ingestion, LD<sub>50</sub> rat, (mg/kg) : > 2000Skin - contact, LD<sub>50</sub> rat, (mg/kg) : n.av.

Irritation (to skin / eye) : Mildly irritating - not to be labelled.

Sensitisation : Not sensitizing.

**11.1.2 Subacute / Chronic Toxicity :**

Carcinogenicity : None.

Mutagenicity : None.

Teratogenicity : None.

Narcotic Effects : None.

**11.2 Practical Experience****11.2.1 Observations relevant for classification :**

None.

**11.2.2 Further Observations :**

None.

**11.3 General Remarks :**

Classification of the preparation has been done by calculation in accordance with EEC directives.

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## 12 Ecological Information

- 12.1 **Ecotoxic Effects, Aquatic Toxicity :**  
LC<sub>50</sub> > 2320 mg/l (96 h) (Gambusia affinis). At pH > 8,5 fish and algae are endangered.
- 12.2 **Behaviour in Sewage Works :**  
Mobility and Accumulation Potential : n.av.  
After neutralization a reduction in harmful effect can be observed.
- 12.3 **Elimination (Persistence and Degradability) :**  
The product can be degraded by abiotic, e.g. chemical or photolytic, processes.  
In aqueous solution with pH < 9 the product hydrolyses and precipitates.
- 12.4 **Other Ecological Information**
- 12.4.1 COD-Value, mg/g : n.av.
- 12.4.2 BOD<sub>5</sub>-Value, mg/g : n.av.
- 12.4.3 AOX-Remarks : n.ap.
- 12.4.4 Significant Components : n.ap.
- 12.4.5 Other adverse effects : n.ap.

## 13 Disposal Considerations (For national Regulations refer to item 15.)

- 13.1 **Residues**
- 13.1.1 Recommendation : D9/ R4 Waste - Code - No. : 06 02 99  
In addition comply with the regional authorities.
- 13.1.2 Safe Handling: See item 7 and 15.
- 13.2 **Contaminated Packaging**
- 13.2.1 Recommendation : Wash with suitable cleaner. Otherwise as described under Residues.
- 13.2.2 Safe Handling : As described under Residues.

## 14 Transport Information

- 14.1 **Transportation by Road or Railway according to ADR and RID**
- Remarks :**  
Class : 8 Classification Code : C5 Packing Group : III  
Hazard-No. : 80 UN-No. : 3266
- 14.1.1 **Instruction Concerning Shipper's Declaration and Packaging :**
- | Volume or Mass                                     | Name and Description   | Risklabel | Packing - Code or instruction |
|--|--|-----------|-------------------------------|
| 3 l inner packing,<br>max. 12 l per shipping piece | UN 3266 Corrosive liquid, basic, inorganic, n.o.s.<br>(Contains Silicic acid, sodium salt) | n.ap.     | --/4G                         |
| 30 l Kunststoff                                    | UN 3266 Corrosive liquid, basic, inorganic, n.o.s.<br>(Contains Silicic acid, sodium salt) | 8         | 1H1/Z                         |
- 14.2 **Classification for Transportation by Inland-Navigation according to ADNO**
- Remarks : Classification has not been done.**  
Class : Division : Category :
- 14.2.1 **Description of Goods :**
- 14.2.2 **Remarks :**
- 14.3 **Classification for Transportation by Vessels according to IMDG**
- Remarks :**  
Class : 8 UN-No. : 3266 Packing Group : III
- 14.3.1 **EmS-No. :** F-A, S-B
- 14.3.2 **Marine Pollutant :** No.
- 14.3.3 **Instruction for Declaration and Labelling :**  
(Packing sizes with possible exemptions not considered)  
**Proper Shipping Name :** Corrosive liquid, basic, inorganic, n.o.s. (Contains Silicic acid, sodium salt)  
**Risk Label :** Corrosive
- 14.3.4 **Remarks :** None.

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Class : 8 UN-No. : 3266 Packing Group : III

**14.4.1 Instruction for Declaration and Labelling :**

(Packing sizes with possible exemptions not considered)

**Proper Shipping Name :** Corrosive liquid, basic, inorganic, n.o.s. (Contains Silicic acid, sodium salt)**Risk Label :** Corrosive

Packing Instructions, Passenger : 818 Cargo : 820

**14.4.2 Remarks :** None.**15 Regulatory Information****15.1 Classification according to EEC-Regulations :**

Classification required by EEC :

Applicable Exemptions :

Hazard Identification :

Hazard Symbol(s) :

Component(s) :

**R-Phrases :****S-Phrases :**

(S 2: Keep out of reach of children.)

S 24: Avoid contact with skin.

S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Additional Markings :

None.

**15.1.1** The above mentioned labelling is valid for distribution to industrial user.

Labelling (formats, exemptions, additional markings) has to be done according to respective regulations.

**15.2 National Regulations**

VOC-Content: n.av.

**16 Other Information****Text of R phrases mentioned in Section 2**

n.ap.

This Material Safety Data Sheet relates to 2001/58/EEC and TRGS 220.

The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product's properties. They must neither be altered nor transferred to other products.

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