

Elite**CODE: 32103175****2 COMPOSITION / INFORMATION ON INGREDIENTS (continued)**CITRONELLOL
COUMARIN
CALCIUM CHLORIDE
Styrene**3 HAZARDS IDENTIFICATION**

- Hazards identification** : Fire hazard :
Above 56°C explosive vapour/air mixtures may be formed.
- Symptoms relating to use**
- Inhalation : None under normal conditions.
 - Skin contact : Prolonged or repeated contact may cause skin to become dry or irritated.
 - Eye contact : Irritation to eyes.
 - Ingestion : Diarrhea. Vomiting. Abdominal pain. Nausea.

4 FIRST AID MEASURES

- First aid measures**
- Inhalation : Not relevant.
 - Skin contact : Rinse affected area thoroughly with water to remove concentrated product. Remove contaminated clothing.
 - Eye contact : Rinse immediately and for a long time with plenty of water. Seek medical attention if the irritation persists. Inadequate first aid may lead to persisting eye complaints.
 - Ingestion : Wash out mouth and do not induce vomiting! Let the victim drink 2 glasses of water on his own. Administer 100 mg of Dimethicone within 1 hour. Same treatment in case of ingestion of > 60 ml and seek medical attention immediately. Take to hospital.
- Note to physician** : Treat symptomatically if heavy vomiting and diarrhoea persist (water and electrolyte). Carry out gastric intubation after having administered Dimethicone and only in case of ingestion of more than 5 swallows without having resulted in vomiting.
- Workplace equipment** : No specific recommendations.

5 FIRE-FIGHTING MEASURES

- Specific hazards** : None.
- Extinguishing media**
- Suitable extinguishing media : All extinguishing media can be used. Alcoholresistant foam.
 - Unsuitable extinguishing media : Do not use a heavy water stream.
- Protection against fire** : Exercise caution when fighting any chemical fire. See Heading 8.

6 ACCIDENTAL RELEASE MEASURES

- Personal precautions** : Spill area may be slippery. Avoid contact with skin and eyes.
- Environmental precautions** : Avoid release to the environment. Prevent entry to sewers and public waters.
- Clean up methods** : Recover usable material in a clean closable container for reuse. Sweep up contaminated material and dispose of as chemical waste. Remove the remainder with water. See Heading 8.

Elite**CODE: 32103175****7 HANDLING AND STORAGE**

- Protection against fire** : Keep away from sparks, open fire and oxidising agents. Above 56°C closed equipment, ventilation, explosion safe electrical equipment.
- Storage** : Store in a cool and frost-free place. Keep away from acids and oxidizing agents.
- Handling** : Avoid contact with skin and eyes.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

- Personal protection**
- **Skin protection** : Wear waterproof gloves when taking up intensively material which is accidentally released (PVC is less suitable). Persons with a sensitive skin are also recommended to wear waterproof gloves when doing a hand-wash.
 - **Eye protection** : Wear safety goggles when clearing accidentally released material.
 - **Respiratory protection** : Ensure sufficient ventilation when taking up intensively material which is accidentally released.
- Environment protection see § 6**
- Occupational Exposure Limits** : Ethanol : MAC [mg/m³] : 1900
Ethanol : MAC [ppm] : 1000
Subtilisin : TLV - ACGIH [mg/m³] : 0.00006
Styrene : OEL (UK)-LTEL [ppm] : 100
Styrene : OEL (UK)-STEL [ppm] : 250

9 PHYSICAL AND CHEMICAL PROPERTIES

- Physical state at 20 °C** : Viscous liquid.
- Colour** : Green.
- Odour** : Fantasy.
- pH value (concentrated product)** : 8,25
- Density** : 1,00 kg/l
- Viscosity at 25°C [mPa.s] (Brookfield LVT)** : 500 mPa.s
- Solubility in water** : Complete.
- Flash point [°C]** : 55-100
- Volatile Organic Compounds (%)** : 6.5
- Explosion limits** : Above 56°C explosive vapour/air mixtures may be formed.
3.4-19 vol % ethanol vapour can react explosive with air (relative density of the mixture = 1.04).
- Oxidising properties** : None.

10 STABILITY AND REACTIVITY

- Stability and reactivity** : Even when properly stored, the proteases will lose their activity. Therefore it is recommended to consume the product within a year.
- Conditions to avoid** : Do not store <0°C and >40°C.
- Materials to avoid** : Acids.
Reacts violently with strong oxidising agents, causing fire and explosion hazard.
- Hazardous decomposition products** : None under normal conditions.

11 TOXICOLOGICAL INFORMATION

- Skin irritation (RBC test: Denaturation Index) (ppm)** : 103 (irritating).
- Evaluation of the security for the human health**

Elite**CODE: 32103175****11 TOXICOLOGICAL INFORMATION (continued)**

- Dermal : Irritation due to the composition.
- Ocular : Irritation due to the composition.
- Ingestion : Hardly toxic (LD 50 rat-ori-theo 5000-15000 ppm).
- Sensitization : This product contains sensitizing fragrance components > 100 ppm: see § 2 and 15.
The used proteases (see §2 and 8) can sensitize as aerosol by inhalation and can lead to skinirritation by prolonged contact by persons with sensitive skin.
- Note : All Techno Green products contain only ELINCS or EINECS registred raw materials and do not contain any ingredients known to be mutagenic, carcinogenic, teratogenic or reproduction toxic (R45,46,47,49,60,61,63,64, EU 97/C234, 67/548/EEC, 88/379/EEC, OSHA, NTP, IARC (cat 1-3))

12 ECOLOGICAL INFORMATION

- Ecological effects information
- Biodegradation [%] Sapromat respirometry test (OECD 301 F) : 60
- EC50 72h Algae (Selenastrum capricornutum) [ppm] (OECD 201) : 70 Slightly toxic
- 48 Hour EC50 Daphnia magna [ppm] (OECD 202) : 7 Toxic.
- Remarks : Techno Green products do not contain any bioaccumulating raw materials and no PCM or nitromusk perfume components.

13 DISPOSAL CONSIDERATIONS

- General : Dispose in a safe manner in accordance with local/national regulations.
- Product : Waste of this product is considered chemical waste. The legislation concerning disposal of waste can differ from one country/state to another. The disposal should therefore be done according to national or local waste legislation. If in doubt, ask the local waste management authority for advice (also see § 6 and § 8 when disposing of).
- Packaging : The empty packaging of this product is not subject to ADR. Cleaned empty packaging (including labels and caps) is fully recycable (HDPE + PP); they may be collected selectively for recycling according to national or local waste legislation. Uncleaned packaging should be disposed of as chemical waste.

14 TRANSPORT INFORMATION

- General information : Not classified.

15 REGULATORY INFORMATION

- Symbol(s) : None.
- R Phrase(s) : None.
- S Phrase(s) : None.
- Further Phrases : Contains : - Subtilisin - Perfume. May produce an allergic reaction.
- EEC Composition of detergents : 5% - 15% : - Anionic surfactants - Nonionic surfactants
Enzymes - Perfumes
LINALOOL, BENZYL BENZOATE, CINNAMYL ALCOHOL, BENZYL ALCOHOL, CITRONELLOL, COUMARIN.

Elite**CODE: 32103175****16 OTHER INFORMATION**

Training advice	: For correct use of this product: see Technical Data Sheet.
List of relevant R phrases (heading 2)	: R10 : Flammable. R11 : Highly flammable. R20 : Harmful by inhalation. R20/22 : Harmful by inhalation and if swallowed. R22 : Harmful if swallowed. R36 : Irritating to eyes. R36/37/38 : Irritating to eyes, respiratory system and skin. R36/38 : Irritating to eyes and skin. R38 : Irritating to skin. R41 : Risk of serious damage to eyes. R42 : May cause sensitization by inhalation. R43 : May cause sensitization by skin contact. R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Sources of key data used	: Gloxhuber C, Künstler K, 1992. Anionic Surfactants, Surfactant Science Series 43, ed M.Dekker. MSDS and additional literature data of the respective suppliers. Chemical cards, 12th edition, 1997, ed. MIA, VMCI, Samson Comprehensive guide to chemical resistant best gloves for various amounts of exposure, 1999, ver.3.5 www
Revision	: First version of this MSDS in this new format.
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Further information	: None.

The contents and format of this SDS are in accordance with EEC Commission Directive 2001/58EC.

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