



SAFETY DATA SHEET

1. Identification of product and company.

Product name: ReduClean
Usage: Product to remove ReduSol and ReduHeat from greenhouses

Manufacturer: Mardenkro B.V., Geerstraat 8, Postbus 280,
5110 AG Baarle-Nassau, Holland
tel: +31(0)13-5077069
fax: +31(0)13-5077343
E-mail: info@mardenkro.com

Telephone number in case of emergency: +31(0)13-5077069

2. Composition of and information on the ingredients.

This product is to be considered as a substance according to EU-legislation.

Chemical description: Solution in water.

Information on the ingredients:

	Weight percentage	CAS-number
Sodium Hydroxide	1,8%	1310-73-2

I-number: 011-002-00-6
Symbol: Irritating
R-phrases: R36-38

Ingredients according to EC Regulation 648/2004

NTA (nitrilotriacetic acid) and salts thereof	5%-15%
Anionic surfactants	< 5%

3. Identification of hazards.

The product is strongly alkaline, the preparation has an irritating effect on the skin and eyes, in case of swallowing, and it affects the digestive organs.

4. First Aid Measures.

Symptoms and effects: Burning skin, cough.

First Aid Measures:

In general:

Inhalation: Move victim into fresh air. In case of persistent irritation, seek

medical advice.
Skin contact: Immediately remove contaminated clothing and rinse the skin with water.
Eye contact: Immediately rinse with generous amounts of water for 10-15 minutes. Consult a physician, preferably an oculist if available.
Ingestion: Rinse mouth well. Get medical attention at a hospital.
Advice to a physician: Eye-check.

5. Fire-fighting measures.

Suitable fire extinguishers: The product itself is not flammable. When the product is forming hydrogen gas, dilute with generous amounts of water.
Unfitted extinguishers: None.
Exposure risk: Low.
Hazardous combustion products: Nitrogen oxydes.
Special protective equipment for fire fighters: In case of fire, use compressed-air masks and wear protective clothing.

6. Precautions in the event of an unexpected release of the product.

Personal precautions: Avoid contact with the product.
For personal protection: Section 8.
Environmental precautions: Discharge waste into the sewage system only after very extensive dilution.
Cleaning methods: Clean with absorbent material and store in suitable containers. Residue should be washed down with generous amounts of water.

7. Handling and storage.

Handling: Avoid contact with the eyes and the skin.
Storage: Store in a frost-resistant location. Do not store in the neighbourhood of strong acids.
Specific precautions: No specific technical safety precautions are required.
Other information: Packaging material: polythene.

8. Precautions to control exposure/personal protection.

Exposure limits: MAC value 110 mg/m³, calculated on the concentration of Sodium Hydroxide.

Precautions to control exposure: Wear protective clothing, gloves and safety glasses.
Keep working clothes separate.
Do not eat, drink or smoke during work.

Personal protection:
- Hands: Rubber or synthetic gloves.

- Eyes: Safety glasses with side flaps.
- Skin and body: Protective clothing and shoes made of Neoprene.
- Inhalation: Avoid inhalation of aerosols.

9. *Physical and chemical properties.*

General information:	Liquid.
Odour:	None.
pH:	14.
Boiling-point:	100°C.
Melting point:	-8°C.
Relative Density:	1,2 (water = 1).
Flash point:	Not available.
Ignition temperature:	Not available.
Explosive characteristics:	Not available.
Viscosity:	5 mPas 20°C Brookfield RVT 0,5 RPM.
Vapour pressure:	23 hPa 20°C.
Water solubility:	soluble.
Solubility in other solvents:	insoluble.

10. *Stability and reactivity.*

Stability:	Stable.
Conditions to avoid:	High temperatures.
Substances to avoid:	Acids, light-metals and zinc.
Hazardous products of decomposition:	None.

11. *Toxicological information.*

Specific toxicological information:

Acute toxicity:	Quantitative data on the toxicity of this product are not available.
Skin:	Irritations.
Eyes:	Irritations.
Inhalation:	Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.
Sensibility:	Unknown.
Genotoxicity:	Unknown.
Other toxicological information:	Unknown.

12. *Ecological information.*

Ecological toxicity effects: Quantitative data on the ecological toxicity effects are not available.

Further ecological information: Organic compounds are good biodegradable. No ecological

problems are to be expected when the product is handled and used with due care and attention.

Biological effects: Fish: LC50: 500 mg/l.

13. Instructions for disposal.

Product: Dispose of as chemical waste in compliance with local and regional regulations.

Packaging: Clean packaging with generous amounts of water and dispose of as waste packaging in accordance with the local Directives.

14. Transport information.

Land transport RID/ADR

Class: 8
Packaging Group: III
Number: 8
Label: 80
UN-Nr. : 1824 Sodium Hydroxide Solution
Transport Card: CEFIC TEC(R)
TREM-card-number: 80S1824
Classification code: C5

Sea-transport IDMG extra information:

Marine Pollutant: No.
Emergency Schedule (EMS): 8-06
Medical First Aid Guide (MFAG): 705

Air-transport ICAO/IATA extra information: None.

15. Regulatory information.

Chemical identity: ReduClean.

I-number: 011-002-00-6

Labelling according to EC Directives.

Symbol/Symbols: Xi Irritating.

Special hazards: R 36/38 Irritating to skin and eyes.

Safety recommendations: S-2 Keep out of the reach of children.
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

16. Other information.

Legislation: This safety information sheet meets the EC directives (91/155/EG) version 2001/58/EG.

Warning: The data above have been collected from existing literature with utmost care. Mardenkro B.V. will not accept any liability for damage, whatever its nature or volume, resulting from the use of these data.

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Compiled by: Mardenkro B.V., Geerstraat 8, Postbus 280,
5110 AG Baarle-Nassau, Holland
tel: +31(0)13-5077069
fax:+31(0)13-5077343
E-mail: info@mardenkro.com