



Safety data-sheet (91/155 EEC)

Printed 25.10.2006

Revision 25.10.2006

elma tec clean S2

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Name of product	elma tec clean S2
Manufacturer/distributor	ELMA Hans Schmidbauer GmbH & Co KG Kolpingstr. 1-7, D-78224 Singen (Htwl.) Phone +49 7731 882-0, Fax +49 7731 882-266 E-Mail info@elma-germany.com Internet www.elma-germany.com
Advice	Chemie/Labor Phone +49 7731 882-287 Fax +49 7731 882-266
Emergency advice	Vergiftungs-Informations-Zentrale Freiburg (Sprache/Language: D, GB) Phone +49 761 19240

Recommended intended purpose(s)

Cleaning concentrate for laboratory and workshop for decalcification and rust-removal.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization

Aqueous acid mixture from non-ionic surfactants and phosphoric acid.

Hazardous ingredients

CAS-No.	EC-No.	Name	[% weight]	Classification
007664-38-2	231-633-2	phosphoric acid	50 - 100	C R34
069011-36-5	500-241-6	isotridecanol, ethoxylated	< 10	Xn R22; Xi R41

Additional advice

Strong acid cleaning concentrate.

3. HAZARDS IDENTIFICATION

R-phrases

34 Causes burns.

! 4. FIRST AID MEASURES

General information

Remove contaminated soaked clothing immediately and dispose it safely.

In case of skin contact

In case of contact with skin wash off immediately with plenty of water.

Consult a doctor if skin irritation persists.

In case of eye contact

In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

In case of ingestion

Do not induce vomiting.

Call for a doctor immediately.

If swallowed seek medical advice immediately and show the doctor packing or label.

Rinse out mouth and give plenty of water to drink.



! Physician's information / possible dangers

Risk of stomach perforation

Treatment (Advice to doctor)

Keep under medical supervision for at least 48 hours.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Limestone powder

Foam

Dry powder

Dry sand

Water spray jet

Extinguishing media which must not be used for safety reasons

no

Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

no

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protection.

High risk of slipping due to leakage/spillage of product.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Do not discharge into the subsoil/soil.

Methods for cleaning up

Take up with absorbent material (e.g. acid binder).

Neutralize with sodium carbonate or slaked lime.

Flush away residues with water.

7. HANDLING AND STORAGE

Advice on safe handling

Use only acid-proof equipment.

When diluting, always stir product into water.

Open and handle container with care!

Advice on protection against fire and explosion

The product is not combustible.

Requirements for storage rooms and vessels

Provide acid-resistant floor.

Keep only in original container.

Advice on storage compatibility

Do not store with alkalis.

Further information on storage conditions

Keep locked up, out of reach of children

Do not keep at temperatures below -5°C.

Information on storage stability

Storage time: 5 years.



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! 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

! Ingredients with occupational exposure limits to be monitored

CAS-No.	Name	Code	[mg/m ³]	[ml/m ³]	Remark
7664-38-2	orthophosphoric-acid	AGW, EU 1			EU

! Hand protection

Gloves (acid-resistant)

Glove material specification [make/type, thickness, permeation time/life]: Butyl, 0,5mm, >=8h.

Glove material specification [make/type, thickness, permeation time/life]: NBR, 0,35mm, >=8h.

Glove material specification [make/type, thickness, permeation time/life]: FKM, 0,4mm, >=8h.

Glove material specification [make/type, thickness, permeation time/life]: NR, 0,5mm, >=8h.

Eye protection

tightly fitting goggles

Skin protection

Acid-resistant protective clothing

General protective measures

Avoid contact with eyes and skin

Hygiene measures

Provide washing facilities at place of work.

Keep away from food and drink.

! 9. PHYSICAL AND CHEMICAL PROPERTIES

Form liquid	Colour yellowish	Odour characteristic
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Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value in delivery state	< 1	20 °C			
starts to boil	> 100 °C				
solidifying range	< -5 °C				
Flash point					No flash point below 100°C.
Combustion temperature					no
Autoignition					no
Density	1,45 g/cm ³	20 °C			
Solubility in water					miscible
Solvent concentration	0 %				
Oxidizing properties	no				
Explosive properties	no				



10. STABILITY AND REACTIVITY

Conditions to avoid

Reactions with alkalies.

Materials to avoid

Reactions with alkalies.

Hazardous decomposition products

No hazardous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
Irritability skin	corrosive			
Irritability eye	corrosive			
Sensitization skin	no			

Experiences made from practice

Has a degreasing effect on the skin.

Causes corrosions.

! 12. ECOLOGICAL INFORMATION

Data on elimination (persistence and degradability)

	Elimination rate	Method of analysis	Method	Validation
Physico-chemical degradability	100 %		Neutralization, pH-measurement	
Biological degradability	> 90 %		OECD 302 B	readily degradable

Additional ecological information

	Value	Method	Remark
COD	98 mgO ₂ /g	DIN ISO 15705	
AOX	The product does not contain any organically bound halogens according to the recipe.		

! General regulation

The surfactants in our product meet the criteria for biodegradation as laid down in Annex III of the Regulation (EC)

No 648/2004 on detergents.

Do not discharge product unmonitored into the environment.

13. DISPOSAL CONSIDERATIONS

Waste code No.

20 01 29*

Name of waste

detergents containing dangerous substances

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 91/689/EEC on hazardous waste.



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Recommendations for the product

Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.
Neutralize with alkalis or lime.

Recommendations for packaging

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

Recommended cleansing agent

Water

! 14. TRANSPORT INFORMATION

! Land and inland navigation transport ADR/RID

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

! Marine transport IMDG

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

! Air transport ICAO/IATA-DGR

UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III

15. REGULATORY INFORMATION

Remarks for classification

The product is classified and labelled in accordance with EC directives/German regulations on dangerous substances.

Classification

C Corrosive

R-phrases

34 Causes burns.

S-phrases

1/2 Keep locked up and out of reach of children.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
27 Take off immediately all contaminated clothing.
28 After contact with skin, wash immediately with plenty of water.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Hazardous ingredients for labeling

phosphoric acid

VOC standard

VOC content 0 %

16. OTHER INFORMATION

Further information

These data are given according to our actual knowledge about this product. This data sheet does not correspond to an assurance by virtue of a contract for properties of the product.

Sources of key data used

Own measurements.

Wording of the R-phrases specified in chapter 2 (not the classification of the formulation!)

R 22 Harmful if swallowed.
R 34 Causes burns.
R 41 Risk of serious damage to eyes.