



Safety data-sheet (91/155 EEC)

Printed 03.04.2006

Revision 03.04.2006

**elma tec clean A1**

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

<b>Name of product</b>	<b>elma tec clean A1</b>
<b>Manufacturer/distributor</b>	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
<b>Advice</b>	Chemie/Labor Phone +49 7731 882-287 Fax +49 7731 882-266
<b>Emergency advice</b>	Vergiftungs-Informations-Zentrale Freiburg Phone +49 761 19240

### Recommended intended purpose(s)

Mildly alkaline emulgating cleaning concentrate for glas and printed circuit boards (PCB's).

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### Chemical characterization

Aqueous, mildly alkaline mixture with anionic and nonionic surfactants, complexing agent and added solvent.

### Hazardous ingredients

CAS-No.	EC-No.	Name	[% weight]	Classification
005064-31-3	225-768-6	trisodium nitrilotriacetate	< 5	Xn R22; Xi R36
69011-36-5	500-241-6	isotridecanol, ethoxylated, 10 eo	< 5	Xn R22; Xi R41
71-23-8	200-746-9	1-propanol	< 20	F R11; Xi R41; R67
85711-69-9	288-330-3	sodium alkane sulfonate C13-C17	5 - 15	Xi R38-41

## 3. HAZARDS IDENTIFICATION

### R-phrases

41 Risk of serious damage to eyes.

## 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 with warm water.

### 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 vomitting.

Refer to medical treatment.

Rinse out mouth and give plenty of water to drink.



---

## 5. FIRE-FIGHTING MEASURES

### Suitable extinguishing media

water

Product does not burn, fire-extinguishing activities according to surrounding.

Alcohol-resistant foam

Dry powder

Carbon dioxide

Water spray jet

---

## 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.

### Methods for cleaning up

Take up with absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

Flush away residues with water.

---

## 7. HANDLING AND STORAGE

### Advice on safe handling

Open and handle container with care!

### Requirements for storage rooms and vessels

Keep only in original container.

### Further information on storage conditions

Keep container tightly closed.

Keep locked up, out of reach of children

Do not keep at temperatures below 5°C.

### Information on storage stability

Storage time: 5 years.

---

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Eye protection

tightly fitting goggles

### 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

colourless

### Odour

alcoholic



## Safety data-sheet (91/155 EEC)

Printed 03.04.2006

Revision 03.04.2006

### elma tec clean A1

#### Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
<b>pH value in delivery state</b>	10,8	20 °C			
<b>Flash point</b>	> 35 °C				Does not maintain the combustion.
<b>Density</b>	1,01 g/cm <sup>3</sup>	20 °C			
<b>Solubility in water</b>					miscible
<b>Solvent concentration</b>	< 20 %				
<b>Oxidizing properties</b>	no				
<b>Explosive properties</b>	no				

#### 10. STABILITY AND REACTIVITY

##### Conditions to avoid

Reactions with acids.

##### Hazardous decomposition products

no

#### 11. TOXICOLOGICAL INFORMATION

##### Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
<b>LD 50 acute oral</b>	> 2500 mg/kg	rat	calculated	
<b>Irritability skin</b>	low irritant effect			
<b>Irritability eye</b>	irritant - risk of strong eye injuries			
<b>Sensitization skin</b>	non-sensitising			

##### Experiences made from practice

Has a degreasing effect on the skin.

#### 12. ECOLOGICAL INFORMATION

##### Data on elimination (persistence and degradability)

	Elimination rate	Method of analysis	Method	Validation
<b>Physico-chemical degradability</b>	100 %		Neutralization, pH-measurement	
<b>Biological degradability</b>	> 80 %		OECD 302 B	readily degradable



## Safety data-sheet (91/155 EEC)

Printed 03.04.2006

Revision 03.04.2006

### elma tec clean A1

#### Additional ecological information

	Value	Method	Remark
<b>COD</b>	ca. 514 mgO <sub>2</sub> /g	DIN ISO 15705	
<b>AOX</b>	The product does not contain any organically bound halogens according to the recipe.		

### 13. DISPOSAL CONSIDERATIONS

Waste code No.	Name of waste
20 01 29*	detergents containing dangerous substances

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

#### Recommendations for the product

Suitable for neutralization are acetic acid (60%, liquid) or citric acid (solid powder, crystallized) if a stainless steel bath is used.

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

#### 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

No hazardous material as defined by the prescriptions.

#### Marine transport IMDG

No hazardous material as defined by the prescriptions.

#### Air transport ICAO/IATA-DGR

No hazardous material as defined by the prescriptions.

### 15. REGULATORY INFORMATION

#### Remarks for classification

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

#### Classification

**Xi** Irritant

#### R-phrases

41 Risk of serious damage to eyes.

#### S-phrases

2 Keep out of the reach of children.

24 Avoid contact with skin.

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

39 Wear eye/face protection.

62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.



Safety data-sheet (91/155 EEC)

Printed 03.04.2006

Revision 03.04.2006

**elma tec clean A1**

---

VOC standard	
VOC content	<20 %

---

## 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 11 Highly flammable.

R 22 Harmful if swallowed.

R 36 Irritating to eyes.

R 38 Irritating to skin.

R 41 Risk of serious damage to eyes.

R 67 Vapours may cause drowsiness and dizziness.