



! SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Name of product elma clean 60 (EC 60)

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Sector of uses [SU]

SU20 - Health services

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Product categories [PC]

PC35 - Washing and cleaning products (including solvent based products)

Process categories [PROC]

PROC8a - Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities

PROC9 - Transfer of substance or preparation into small containers (dedicated filling line, including weighing)

PROC13 - Treatment of articles by dipping and pouring

Environmental release categories [ERC]

ERC8a - Wide dispersive indoor use of processing aids in open systems

ERC8b - Wide dispersive indoor use of reactive substances in open systems

Uses advised against

! Remark

Do not use for injecting or spraying.

Recommended intended purpose(s)

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

Details of the supplier of the safety data sheet

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-ultrasonic.com
Internet www.elma-ultrasonic.com

Advice

Chemie/Labor: Email: chemlab@elma-ultrasonic.com
Phone +49 7731 882-287
Fax +49 7731 882-266

Emergency telephone number

Emergency advice

Vergiftungs-Informations-Zentrale Freiburg
(Sprache/Language: D, GB)
Phone +49 761 19240



! SECTION 2: Hazards identification

Classification of the substance or mixture

Classification according to 67/548/EEC or 1999/45/EC

C; R34

R-phrases

34 Causes burns.

Label elements

Labelling according to 67/548/EEC or 1999/45/EC

Remarks for labelling

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

C Corrosive



R-phrases

34 Causes burns.

S-phrases

- 1/2 Keep locked up and out of the 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.
37/39 Wear suitable gloves and eye/face protection.
46 If swallowed, seek medical advice immediately and show this container or label.

Hazardous ingredients for labeling

phosphoric acid

Other hazards

! Information pertaining to special dangers for human and environment

May be harmful if swallowed.

PBT/vPvB: see section 12.

! SECTION 3: Composition/ information on ingredients

Mixtures

Description

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

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
7664-38-2	231-633-2	phosphoric acid	50 - 100	C R34
69011-36-5		isotridecanol, ethoxylated	< 10	Xn R22; Xi R41

REACH

CAS No	Name	REACH registration number
--------	------	---------------------------



REACH (continued)

CAS No	Name	REACH registration number
7664-38-2	phosphoric acid	01-2119485924-24

Additional advice

Strong acid cleaning concentrate.

! SECTION 4: First aid measures

Description of first aid measures

General information

Remove contaminated soaked clothing immediately and dispose it safely.

! In case of inhalation

In case of inhalation of mist seek medical advice.

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.

Most important symptoms and effects, both acute and delayed

Physician's information / possible dangers

Risk of stomach perforation

Indication of any immediate medical attention and special treatment needed

Treatment (Advice to doctor)

Keep under medical supervision for at least 48 hours.

! SECTION 5: Firefighting measures

Extinguishing media

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 hazards arising from the substance or mixture

In case of fire formation of dangerous gases possible.

In the event of fire the following can be released:

Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)

Advice for firefighters

! Special protective equipment for fire-fighters

Do not inhale explosion and/or combustion gases.

! SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

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 and material for containment and cleaning up

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

Neutralize with sodium carbonate or slaked lime.

Flush away residues with water.

After taking up the material dispose according to regulation.

Reference to other sections

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

! SECTION 7: Handling and storage

Precautions for safe handling

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.

Conditions for safe storage, including any incompatibilities

! Requirements for storage rooms and vessels

Provide acid-resistant floor.

Keep only in unopened original container.

Advice on storage compatibility

Do not store with alkalies.

! Further information on storage conditions

Keep container tightly closed, open and handle carefully.

Keep locked up, out of reach of children

Protect from heat and direct solar radiation.

Store in a dry place.

Do not keep at temperatures below -5°C.

Information on storage stability

Storage time: 5 years.



Specific end use(s)
Recommendation(s) for intended use
no further

! SECTION 8: Exposure controls/personal protection

Control parameters

Indicative occupational exposure limit values (91/322/EEC, 2000/39/EC, 2006/15/EC or 2009/161/EU)

CAS No	Name	Code	[mg/m ³]	[ppm]	Remark
7664-38-2	phosphoric acid	8 hours	1		
		Short-term	2		

! Additional advice

Exposure controls

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

! General protective measures

Avoid contact with eyes and skin

Do not inhale aerosols

Hygiene measures

Provide washing facilities at place of work.

Keep away from food and drink.

! Limitation and surveillance of the environment

Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Form

liquid

Colour

yellowish

Odour

characteristic

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.



	Value	Temperature	at	Method	Remark
Flammable solid	not applicable				
Flammability (gas)	not applicable				
Ignition temperature					no
Autoignition					no
Lower explosion limit					not relevant
Upper explosion limit					not relevant
Vapour pressure	not determined				
Density	1,45 g/cm ³	20 °C			
Rel. vapour density	not available				
Solubility in water					miscible
Partition coefficient (log p_{OW})					No informations available.
Viscosity	not determined				
Solvent concentration	0 %				
Oxidizing properties	no				
Explosive properties	no				
Other information	No further relevant informations available.				

! SECTION 10: Stability and reactivity

Reactivity

No further hazardous reactions known if used as directed.
Exothermic reaction with alkalies.

Chemical stability

Stable at ambient temperature.

Possibility of hazardous reactions

Reactions with alkalies.



Conditions to avoid

Heat and direct solar radiation.

Incompatible materials

Materials to avoid

Reactions with alkalis.

Hazardous decomposition products

No decomposition if used as directed.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	2015 mg/kg		ATE (acute toxicity estimate)	
LD50 acute dermal	4090 mg/kg		ATE (acute toxicity estimate)	
Irritability skin	corrosive			
Irritability eye	corrosive			
Skin sensitization	no			

Toxicity test (Additional information)

phosphoric acid : LD50(oral, rat): 1530 mg/kg, LD50(dermal, rabbit): 2740 mg/kg .

Experiences made from practice

Has a degreasing effect on the skin.

Causes corrosions.

! SECTION 12: Ecological information

Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	not available			
Daphnia	not available			
Algae	not available			

Persistence and degradability

Physico-chemical degradability	100 %		Neutralization, pH-measurement	Acid properties can be eliminated up to 100% by neutralization.
Biological degradability	> 90 %		OECD 302 B	readily degradable



Bioaccumulative potential
not available

Mobility in soil
not available

Results of PBT and vPvB assessment
The product does not contain any PBT-/vPvB-substances according to the recipe.

Other adverse effects
No further relevant informations available.

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 allow uncontrolled leakage of product into the environment.

! SECTION 13: Disposal considerations

Waste treatment methods

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

Do not dispose with household waste.
Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.
Neutralize with alkalies 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

! SECTION 14: Transport information

! Land and inland navigation transport ADR/RID
UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III, (E)

! Marine transport IMDG
UN 1805 PHOSPHORIC ACID SOLUTION, 8, III

Air transport ICAO/IATA-DGR
UN 1805 PHOSPHORIC ACID, SOLUTION, 8, III



Special precautions for user
no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not relevant

! SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

VOC standard
VOC content 0 %

Chemical Safety Assessment
For this mixture a chemical safety assessment were not carried out.

SECTION 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.
Indication of changes: "!" = Data changed compared with the previous version.

Sources of key data used
Own measurements.

Wording of the R/H-phrases specified in chapter 3 (not the classification of the mixture!)

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