



Ultrasonics.Steam.Ultraclean.

Safety Data Sheet according to Regulation (EC)  
No. 1907/2006 (REACH)

Printed 24.09.2019

Revision 24.09.2019 (GB) Version 2.0

**EC 90**

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

**1.1. Product identifier**

Name of product EC 90

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

**Identified uses**

**Sector of uses [SU]**

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

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

**Recommended intended purpose(s)**

Ultrasonic cleaning concentrate for jewellery and watch components to remove polishing pastes and general contamination.

**1.3. Details of the supplier of the safety data sheet**

**Manufacturer/distributor**

Elma Schmidbauer GmbH  
Gottlieb-Daimler-Str. 17, 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

**1.4. Emergency telephone number**

**Emergency advice**

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

**! SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]**

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Skin Irrit. 2	H315	Expert judgement and weight of evidence determination.
Eye Dam. 1	H318	Calculation method.
Aquatic Chronic 3	H412	Calculation method.

**Hazard Statements**

H315	Causes skin irritation.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

**Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]**



GHS05



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**Signal word**

Danger

**Hazard Statements**

H315 Causes skin irritation.  
H318 Causes serious eye damage.  
H412 Harmful to aquatic life with long lasting effects.

**Precautionary Statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.  
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.  
P302 + P352 IF ON SKIN: Wash with plenty of water.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a doctor.  
P332 + P313 If skin irritation occurs: Get medical advice/attention.

**Hazardous ingredients for labeling**

Alcohols, secondary C11-15, ethoxylated, Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl), C10- fatty alcohol, ethoxylated, Sulfonic acids, C14-17-sec-alkane, sodium salts

**2.3. Other hazards**

Acute Tox. 5 (oral) H303: May be harmful if swallowed.

Aquatic Acute 3 H402: Harmful to aquatic life.

**Results of PBT and vPvB assessment**

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

**! SECTION 3: Composition/ information on ingredients**

**3.1. Substances**

not applicable

**3.2. Mixtures**

**! Description**

Aqueous neutral mixture from anionic and non-ionic surfactants, phosphates, complexing agent, corrosion inhibitors, dye and perfumes.

**! Hazardous ingredients**

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/ GHS]
166736-08-9		C10- fatty alcohol, ethoxylated	< 5	Acute Tox. 4, H302 / Eye Dam. 1, H318
15763-76-5	239-854-6	sodium cumenesulphonate	< 5	Eye Irrit. 2, H319
164524-02-1	629-764-9	potassium cumenesulphonate	< 5	Eye Irrit. 2, H319
97489-15-1	307-055-2	Sulfonic acids, C14-17-sec-alkane, sodium salts	5 - 15	Acute Tox. 4, H302 / Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Chronic 3, H412
68155-07-7	931-329-6	Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	5 - 15	Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Chronic 2, H411
68131-40-8		Alcohols, secondary C11-15, ethoxylated	< 5	Acute Tox. 4, H302 / Acute Tox. 4, H332 / Skin Irrit. 2, H315 / Eye Dam. 1, H318



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**REACH**

CAS No	Name	REACH registration number
166736-08-9	C10- fatty alcohol, ethoxylated	Not relevant (polymer).
15763-76-5	sodium cumenesulphonate	01-2119489411-37
164524-02-1	potassium cumenesulphonate	01-2119489427-24
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	01-2119489924-20
68155-07-7	Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	01-2119490100-53
68131-40-8	Alcohols, secondary C11-15, ethoxylated	Not relevant (polymer).

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**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

In the event of persistent symptoms receive medical treatment.

**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.

Medical treatment.

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

Rinse out mouth and give plenty of water to drink.

**4.2. Most important symptoms and effects, both acute and delayed**

**Physician's information / possible symptoms**

No further informations available.

**4.3. Indication of any immediate medical attention and special treatment needed**

**Treatment (Advice to doctor)**

No further informations available.

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**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable extinguishing media**

Fire-extinguishing activities according to surrounding.

Alcohol-resistant foam

Dry powder

Carbon dioxide

Water spray jet

**5.2. Special hazards arising from the substance or mixture**

Risk of formation of toxic pyrolyse products.

In case of fire formation of dangerous gases possible.

In the event of fire the following can be released:

Nitrogen oxides (NO<sub>x</sub>)

Carbon monoxide (CO)

Phosphorus oxides (e.g. phosphoruspentoxide)

Sulphur dioxide (SO<sub>2</sub>)

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### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Do not inhale explosion and/or combustion gases.

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## ! SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Use personal protection.

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

#### For emergency responders

Use personal protective clothing.

Use personal protection.

Forms slippery surfaces with water.

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

### 6.2. Environmental precautions

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

Do not discharge into the subsoil/soil.

### 6.3. Methods and material for containment and cleaning up

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

Flush away residues with water.

After taking up the material dispose according to regulation.

### 6.4. Reference to other sections

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

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## ! SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Avoid formation of aerosols.

Open and handle container with care!

#### ! General protective measures

Avoid contact with eyes and skin

Do not inhale aerosols

#### Hygiene measures

Provide washing facilities at place of work.

Keep separated from food and feed.

#### Advice on protection against fire and explosion

The product is not combustible.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep only in unopened original container.

#### ! Advice on storage compatibility

Do not store with strong oxidising agents.

#### Further information on storage conditions

Keep container tightly closed.

Keep locked up, out of reach of children

Protect from heat and direct solar radiation.

Do not keep at temperatures below 5 °C.



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Do not keep at temperatures above 30 °C.

**Information on storage stability**

Storage time: 24 months.

**7.3. Specific end use(s)**

**Recommendation(s) for intended use**

Care for thoroughly room ventilation for higher bath temperatures.  
see section 8.

**! SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

**DNEL-/PNEC-values**

**DNEL worker**

CAS No	Substance name	Value	Code	Remark
68155-07-7	Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	4,16 mg/kg bw/day	DNEL long-term dermal (systemic)	
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	5 mg/kg bw/day	DNEL long-term dermal (systemic)	

**PNEC**

CAS No	Substance name	Value	Code	Remark
68155-07-7	Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	0,007 mg/l	PNEC aquatic, freshwater	
		830 mg/l	PNEC sewage treatment plant (STP)	
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	0,04 mg/l	PNEC aquatic, freshwater	
		600 mg/l	PNEC sewage treatment plant (STP)	

**! Additional advice**

Occupational exposure limits: No relevant informations available.

**8.2. Exposure controls**

**! Hand protection**

chemical-resistant gloves

Glove material specification [make/type, thickness]: FKM, 0.4mm.

Glove material specification [make/type, thickness]: NBR, 0.35mm.

Glove material specification [make/type, thickness]: Butyl, 0.5mm.

**Eye protection**

tightly fitting goggles

**Limitation and surveillance of the environment**

Avoid penetration into the subsoil/soil.

Do not discharge into surface waters.

**Appropriate engineering controls**

Technical exhaustion for long-term expositions or higher bath temperatures.



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**! SECTION 9: Physical and chemical properties**

**9.1. Information on basic physical and chemical properties**

**Appearance**

liquid

**Colour**

blue-green

**Odour**

mild

**Odour threshold**

not determined

**Important health, safety and environmental information**

	Value	Temperature	at	Method	Remark
<b>pH value</b>	8,8	20 °C			
<b>boiling point</b>	>= 100 °C				
<b>solidifying point</b>	not determined				
<b>Flash point</b>					No flash point below 100 °C.
<b>Flammable (solid)</b>	not applicable				
<b>Flammability (gas)</b>	not applicable				
<b>Ignition temperature</b>	not determined				
<b>Self ignition temperature</b>					not spontaneously flammable
<b>Lower explosion limit</b>	not relevant				
<b>Upper explosion limit</b>	not relevant				
<b>Vapour pressure</b>	ca. 23 - 24 hPa	20 °C			
<b>Relative density</b>	1,08 g/cm <sup>3</sup>	20 °C			
<b>Vapour density</b>	not available				
<b>Solubility in water</b>					miscible
<b>Solubility/other</b>	not determined				
<b>Partition coefficient n-octanol/water (log P O/W)</b>	3,5 - 4,2				Value of Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl).
<b>Decomposition temperature</b>	>= 100 °C				
<b>Viscosity</b>	not determined				



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	Value	Temperature	at	Method	Remark
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**Solvent content**

0 %

**! Vapourisation rate**

Water: 0.36 (ASTM D3539).

**Oxidising properties**

no

**Explosive properties**

no

**9.2. Other information**

The mixture is not classified as corrosive to metals.

No further relevant informations available.

## ! SECTION 10: Stability and reactivity

**10.1. Reactivity**

No hazardous reactions known if used as directed.

**10.2. Chemical stability**

Stable at ambient temperature.

**10.3. Possibility of hazardous reactions**

Reactions with oxidising agents.

Reaction with nitric acid

**10.4. Conditions to avoid**

Heat and direct solar radiation.

**10.5. Incompatible materials**

**! Substances to avoid**

Reactions with oxidising agents.

Reaction with nitric acid

Reactions with inorganic acid chlorides.

**10.6. Hazardous decomposition products**

No decomposition if used as directed.

## ! SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

**Acute toxicity/Irritation/Sensitization**

	Value/Validation	Species	Method	Remark
<b>LD50 acute oral</b>	4270 mg/kg		ATE (acute toxicity estimate)	
<b>LD50 acute dermal</b>	> 5000 mg/kg		ATE (acute toxicity estimate)	



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	Value/Validation	Species	Method	Remark
<b>LC50 acute inhalation</b>	> 50 mg/l ()		ATE (acute toxicity estimate)	vapours
<b>Skin irritation</b>	irritant			
<b>Eye irritation</b>	Causes serious eye damage.			
<b>Skin sensitization</b>	The mixture is not classified as skin sensitiser.			

**Specific target organ toxicity (single exposure)**

The mixture is not classified as specific target organ toxicant (single exposure).

**Specific target organ toxicity (repeated exposure)**

The mixture is not classified as specific target organ toxicant (repeated exposure).

**Aspiration hazard**

The mixture is not classified as aspiration hazardous.

**Toxicity test (Additional information)**

The mixture is not classified as mutagen / not classified as carcinogen / not classified as reproductive toxicant.

**Experiences made from practice**

Has a degreasing effect on the skin.

**! SECTION 12: Ecological information**

**12.1. Toxicity**

**Ecotoxicological effects**

	Value	Species	Method	Validation
<b>Fish</b>	LC50 11,5 mg/l		calculated	
<b>Daphnia</b>	EC50 12,6 mg/l		calculated	
<b>Algae</b>	EC50 12,5 mg/l		calculated	

**12.2. Persistence and degradability**

<b>Biological degradability</b>	>= 85 %	DOC decrease	calculated	Biodegradable
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**12.3. Bioaccumulative potential**

sodium cumenesulphonate: Bioaccumulation is improbable.

potassium cumenesulphonate: Bioaccumulation is improbable.

Sulfonic acids, C14-17-sec-alkane, sodium salts: Accumulation in organisms is not expected (log Pow: 0.24).

C10- fatty alcohol, ethoxylated: Accumulation in organisms is not expected.

Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl): Because of the n-octanol/water partition coefficient accumulation in organisms is possible (log Pow >3).

Alcohols, secondary C11-15, ethoxylated: Significant accumulation in organisms is not expected (log Pow: 2.72).

**12.4. Mobility in soil**

sodium cumenesulphonate: Adsorption on soil is not expected.

potassium cumenesulphonate: Adsorption on soil is not expected.

Sulfonic acids, C14-17-sec-alkane, sodium salts: Moderate adsorption on soil.

C10- fatty alcohol, ethoxylated: Adsorption on soil is possible.

Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl): Koc: 243, moderately mobile in soil.



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Alcohols, secondary C11-15, ethoxylated: not available.

**12.5. Results of PBT and vPvB assessment**

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

**12.6. Other adverse effects**

No further relevant informations available.

**Additional ecological information**

	Value	Method	Remark
<b>COD</b>	822 mgO2/g	calculated	
<b>AOX</b>	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.

Acute aquatic environmental hazards: Aquatic Acute 3 H402: Harmful to aquatic life.

Chronic aquatic environmental hazards: Aquatic Chronic 3 H412: Harmful to aquatic life with long lasting effects.

Do not allow uncontrolled leakage of product into the environment.

**! SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

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

Wastes marked with an asterisk are considered to be hazardous waste pursuant to Directive 2008/98/EC 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.

**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**

	ADR/RID	IMDG	IATA-DGR
<b>14.1. UN number</b>	-	-	-
<b>14.2. UN proper shipping name</b>	-	-	-
<b>14.3. Transport hazard class(es)</b>	-	-	-
<b>14.4. Packing group</b>	-	-	-
<b>14.5. Environmental hazards</b>	-	-	-



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**14.6. Special precautions for user**

no

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

not relevant

**Land and inland navigation transport ADR/RID**

No dangerous goods as defined by these transport regulations.

**Marine transport IMDG**

No hazardous material as defined by the prescriptions.

**Air transport ICAO/IATA-DGR**

No hazardous material as defined by the prescriptions.

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**! SECTION 15: Regulatory information**

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

**Authorizations**

not relevant

**Application restrictions**

Regulation (EC) No 1907/2006 (REACH), Annex XVII No 3 - not relevant if used as directed.

**Other regulations (EU)**

Regulation (EC) No 648/2004 (Detergents regulation).

Directive 2012/18/EU, Annex I: not mentioned.

**! VOC standard**

**VOC content** <0,1 %

**15.2. Chemical Safety Assessment**

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

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**SECTION 16: Other information**

**Recommended uses and restrictions**

National and local regulations concerning chemicals shall be observed.

**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. Previous version: 1.0

**Sources of key data used**

Own measurements.

European Chemicals Agency, <http://echa.europa.eu/>.

Informations from our suppliers.

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.