



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

1.1. Product identifier

Name of product elma unimix

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

Uses advised against

! Remark

Do not use for injecting or spraying.

! Recommended intended purpose(s)

Ready-for-use rinsing agent with reiling properties useful after the cleaning and the rinsing and before the drying step of metallic precision parts.

This data sheet holds beginning from lot-No. 01, week 30, 2014.

1.3. Details of the supplier of the safety data sheet

Manufacturer/distributor

Elma Hans Schmidbauer GmbH & Co. KG
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
Phone +49 7731 882-287
Fax +49 7731 882-266

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 67/548/EEC or 1999/45/EC

R10
R52/53
Xn; R65
R66
R67

R-phrases

10	Flammable.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.



2.2. Label elements

Labelling according to 1999/45/EC

Remarks for labelling

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

Xn Harmful



R-phrases

10 Flammable.
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
65 Harmful: may cause lung damage if swallowed.
66 Repeated exposure may cause skin dryness or cracking.
67 Vapours may cause drowsiness and dizziness.

S-phrases

16 Keep away from sources of ignition - No smoking.
2 Keep out of the reach of children.
23 Do not breathe vapour.
24/25 Avoid contact with skin and eyes.
61 Avoid release to the environment. Refer to special instructions/safety data sheets.
62 If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

! Hazardous ingredients for labeling

mixture of dearomatized hydrocarbons (<0,1% aromatics)

2.3. Other hazards

! Information pertaining to special dangers for human and environment

Causes mild skin irritation.

! Results of PBT and vPvB assessment

The product contains <0.1% (1.3ppm) of a PBT-/vPvB-substance (dyestuff).

! SECTION 3: Composition/ information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Description

Mixture of hydrocarbons, aromatics removed, and additives of alkoxy with small additions of different oils, with siliconoil and dyestuff.

! Hazardous ingredients

CAS No	EC No	Name	[% weight]	Classification according to 67/548/EEC
	927-241-2	mixture of dearomatized hydrocarbons (< 0,1% aromatics) [Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics]	90 - 100	R10; Xn R65; R66; R67; R52/53
763-32-6	212-110-8	3-methylbut-3-en-1-ol	< 5	R10; Xi R41
8042-47-5	232-455-8	White mineral oil (paraffin oil)	< 5	



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Hazardous ingredients (continued)

CAS No	EC No	Name	[% weight]	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
	927-241-2	mixture of dearomatized hydrocarbons (< 0,1% aromatics) [Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics]	90 - 100	Flam. Liq. 3, H226 / Asp. Tox. 1, H304 / STOT SE 3, H336 / , EUH066 / Aquatic Chronic 3, H412
763-32-6	212-110-8	3-methylbut-3-en-1-ol	< 5	Flam. Liq. 3, H226 / Eye Dam. 1, H318
8042-47-5	232-455-8	White mineral oil (paraffin oil)	< 5	Asp. Tox. 1, H304

REACH

CAS No	Name	REACH registration number
	mixture of dearomatized hydrocarbons (<0,1% aromatics) [Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics]	01-2119471843-32
763-32-6	3-methylbut-3-en-1-ol	01-2119438443-41
8042-47-5	White mineral oil (paraffin oil)	Not yet available from supplier.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
Take affected person into fresh air.

In case of inhalation

Remove the casualty into fresh air and keep him immobile.
In the event of symptoms refer for medical treatment.

In case of skin contact

In case of contact with skin wash off with soap and 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.

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

Physician's information / possible symptoms

Dizziness

Physician's information / possible dangers

In case of ingestion risk of pulmonary oedema and pneumonia.

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

Treatment (Advice to doctor)

Continue to monitor for pneumonia and pulmonary oedema.
If swallowed, flush stomach adding activated charcoal.
Keep under medical supervision for at least 48 hours.



! SECTION 5: Firefighting measures

5.1. Extinguishing media

! Suitable extinguishing media

Alcohol-resistant foam

Dry powder

Carbon dioxide

Water spray jet

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released:

Carbon monoxide (CO)

Flammable vapor-air-mixture are more heavy than air. Inflammation over far distance is possible.

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Do not inhale explosion and/or combustion gases.

Additional information

Cool endangered containers with water spray jet.

Collect contaminated firefighting water separately, must not be discharged into the drains.

! SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Ensure adequate ventilation.

Use personal protection.

Keep away sources of ignition.

! For emergency responders

Ensure adequate ventilation.

Remove persons to safety.

Use personal protective clothing.

Use personal protection.

Keep away sources of ignition.

Use breathing apparatus if exposed to vapours/dust/aerosol.

Pay attention to extension of gas especially at ground (heavier than air) and in direction of the wind.

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

Send in suitable containers for recovery or disposal.

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

6.4. Reference to other sections

Informations for safe handling see chapter 7.

Informations for personal protective equipment see chapter 8.

Informations for disposal see chapter 13.



! 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!
Keep container tightly closed.
Provide good room ventilation even at ground level (vapours are heavier than air).
Use only in well-ventilated areas.
Use solvent-resistant equipment.
Keep limited supplies at workplace.

General protective measures

Avoid contact with eyes and skin
Do not inhale gases/vapours/aerosols.

Hygiene measures

Provide washing facilities at place of work.
Keep away from food and drink.

Advice on protection against fire and explosion

Keep away from sources of ignition
Vapours can form an explosive mixture with air.
Ignitable mixtures can be formed in the empty container.
Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Ventilate store-rooms thoroughly.
Keep only in unopened original container.

Advice on storage compatibility

Do not store together with oxidizing agents.

Further information on storage conditions

Keep locked up, out of reach of children
Protect from heat and direct solar radiation.
Keep container dry, tightly closed and store at cool and aired place.
Keep under lock and key or accessible only to specialists or people authorized by them.

Information on storage stability

Storage time: 3 years.

7.3. Specific end use(s)

! Recommendation(s) for intended use

See section 1.2

! SECTION 8: Exposure controls/personal protection

8.1. Control parameters

! Additional advice

Occupational exposure limits for mixtures of hydrocarbons.

8.2. Exposure controls

Respiratory protection

In case of insufficient ventilation or long-term effect use breathing apparatus.
Short term: filter apparatus, filter A

**Hand protection**

Gloves (solvent-resistant)

Glove material specification [make/type, thickness]: FKM, 0,4mm.

Eye protection

tightly fitting goggles

! Limitation and surveillance of the environment

Avoid penetration into the subsoil/soil.

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

Appropriate engineering controls

Technical exhaustion if there is a long-term exposition

! SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Appearance**

liquid

Colour

bright red

Odour

characteristic

Odour threshold

not determined

Important health, safety and environmental information

	Value	Temperature	at	Method	Remark
pH value	not applicable				
starts to boil	ab 80 °C				
solidifying point	< -12 °C				
Flash point	23 - 25 °C				
Flammable (solid)	not applicable				
Flammability (gas)	not applicable				
Ignition temperature	> 200 °C				
Self ignition temperature					not spontaneously flammable
Lower explosion limit	0,6 %				
Upper explosion limit	8 %				
Vapour pressure	27 hPa	20 °C			
Relative density	0,69 - 0,83 g/cm ³	20 °C			
Vapour density	> 1				
Solubility in water					partially soluble
Solubility/other	not determined				



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	Value	Temperature	at	Method	Remark
Partition coefficient n-octanol/water (log P O/W)	ca. 4,5 - 6,5				Value of hydrocarbon components.
Decomposition temperature	> 200 °C				
Viscosity kinematic	ca. 1 mm ² /s	20 °C			
Solvent concentration	90 - 100 %				
! Vapourisation rate	Mixture of dearomatized hydrocarbons: 0.56 (ASTM D3539).				

Oxidising properties

no

Explosive properties

Not classified as explosive. Vapours can form an explosive mixture with air.

9.2. Other information

Vapours are heavier than air.

SECTION 10: Stability and reactivity

10.1. Reactivity

No further hazardous reactions known if used as directed.
Vapours can form an explosive mixture with air.

10.2. Chemical stability

Stable at ambient temperature.

10.3. Possibility of hazardous reactions

Reactions with oxidising agents.

10.4. Conditions to avoid

Heat and direct solar radiation.
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

10.5. Incompatible materials

Materials to avoid

Reactions with oxidising agents.

10.6. Hazardous decomposition products

No decomposition if used as directed.

! SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity/Irritability/Sensitization

Value/Validation	Species	Method	Remark
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	Value/Validation	Species	Method	Remark
LD50 acute oral	> 5000 mg/kg		ATE (acute toxicity estimate)	
LD50 acute dermal	> 5000 mg/kg		ATE (acute toxicity estimate)	
LC50 acute inhalation	> 50 mg/l ()		ATE (acute toxicity estimate)	vapours
Irritability skin	low irritant effect			
Irritability eye	low irritant - no labeling duty			The product was classified on the basis of the calculation procedure of the preparation directive (1999/45/EC).
Skin sensitization	non-sensitizing			

! Specific target organ toxicity (single exposure)

Narcotic effect: STOT SE 3 H336: May cause drowsiness or dizziness.

! Specific target organ toxicity (repeated exposure)

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

! Aspiration hazard

Aspiration hazard: Asp. Tox. 1 H304: May be fatal if swallowed and enters airways.

! Toxicity test (Additional information)

The mixture is not classified as mutagen / not classified as carcinogen / not classified as reproductive toxicant.
benzene: < 10 ppm.

Experiences made from practice

Has a degreasing effect on the skin.

Additional information

The product has not been tested. The information is derived from products of similar composition.

! SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 11 - 32 mg/l		calculated	
Daphnia	EC50 23 - 49 mg/l		calculated	
Algae	EC50 756 mg/l		calculated	

12.2. Persistence and degradability

Biological degradability

Moderately/partially biodegradable

12.3. Bioaccumulative potential

Mixture of dearomatized hydrocarbons: Because of the n-octanol/water partition coefficient (log Pow) accumulation in organisms is possible.



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3-methylbut-3-en-1-ol: Significant accumulation in organisms is not expected (log Pow: 0.89).
White mineral oil (paraffin oil): not available.

12.4. Mobility in soil

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics: The product may evaporate relatively quickly. The proportion of the distribution on the sediment layer and waste water solids is probably < 10%.

3-methylbut-3-en-1-ol: Adsorption on soil is not expected.

White mineral oil (paraffin oil): not available.

12.5. Results of PBT and vPvB assessment

The product contains <0.1% (1.3ppm) of a PBT-/vPvB-substance (dyestuff).

12.6. Other adverse effects

No further relevant informations available.

Additional ecological information

Value	Method	Remark
AOX		The product does not contain any organically bound halogens according to the recipe.

! General regulation

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.

Product is not allowed to be discharged into the ground water or aquatic environment.

! SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste code No.	Name of waste
14 06 03*	other solvents and solvent mixtures

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

! Recommendations for the product

For recycling consult manufacturer.

Do not dispose with household waste. Do not discharge into the drains.

Material recycling possible.

Incinerate in suitable incineration plant, but care for official regulations.

Recommendations for packaging

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

General information

Germany: Entsorgungsweg wie für Altöl möglich (Tankstelle, kommunaler Reinigungsbetrieb)

! SECTION 14: Transport information

	ADR/RID	IMDG	IATA-DGR
14.1. UN number	UN 3295	UN 3295	UN 3295
14.2. UN proper shipping name	HYDROCARBONS, LIQUID, N.O.S.	HYDROCARBONS, LIQUID, N.O.S.	HYDROCARBONS, LIQUID, N.O.S.



	ADR/RID	IMDG	IATA-DGR
14.3. Transport hazard class(es)	3	3	3
14.4. Packing group	III	III	III
14.5. Environmental hazards	No	No	No
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	Hazard label(s) 3 tunnel restriction code D/E		

! 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 + 40 - not relevant if used as directed.

! Other regulations (EU)

Directive 2012/18/EU, Annex I: P5c.

VOC standard

VOC content 96,4 %

15.2. Chemical Safety Assessment

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

! 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: 1.5

Sources of key data used

Own measurements.

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

R 10 Flammable.

R 41 Risk of serious damage to eyes.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

H226 Flammable liquid and vapour.



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- H304 May be fatal if swallowed and enters airways.
- H318 Causes serious eye damage.
- H336 May cause drowsiness or dizziness.
- H412 Harmful to aquatic life with long lasting effects.