



Safety Data Sheet according to Regulation (EC)

No. 1907/2006 (REACH)

Printed 11.03.2011

Revision 11.10.2010

elma spirol

1. Identification of the substance/mixture and of the company/undertaking

Product identifier

Name of product elma spirol
Name of substance octane (isomers)
EC No 208-759-1
CAS No 540-84-1

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 advice

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

Recommended intended purpose(s)

Solvent for degreasing and cleaning of metallic precision parts (watches etc.).

! 2. Hazards identification

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

F; R11

Xi; R38

N; R50/53

Xn; R65

R67

R-phrases

11 Highly flammable.

38 Irritating to skin.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

65 Harmful: may cause lung damage if swallowed.

67 Vapours may cause drowsiness and dizziness.

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

Hazard classes and Hazard categories	Hazard Statements	Classification procedure
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Flam. Liq. 2	H225
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Skin Irrit. 2	H315
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STOT SE 3	H336
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Asp. Tox. 1	H304
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Aquatic Acute 1	H400
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Aquatic Chronic 1	H410
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Hazard Statements

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.



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H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Additional hints

Listed substance (Regulation (EC) No 1272/2008, Annex VI, part 3).

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



GHS02



GHS07



GHS08



GHS09

! Signal word

Danger

Hazard Statements

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements

P102	Keep out of reach of children.
P210	Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P261	Avoid breathing mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P304	IF INHALED:
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P331	Do NOT induce vomiting.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

! Hazardous ingredients for labeling

octane (isomers)

Other hazards

Acute Tox. 5 (oral + inhal.) H303 + H333: May be harmful if swallowed or if inhaled.

Information pertaining to special dangers for human and environment

In use, may form flammable/explosive vapour-air mixture.



! 3. Composition/information on ingredients

! Description

Mixture of C8-isoparaffinic hydrocarbons.

CAS No 540-84-1

octane (isomers)

EC No 208-759-1

! 4. 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 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.

Physician's information / possible symptoms

Dizziness

! Physician's information / possible dangers

Risk of pulmonary oedema

Risk of pneumonia

! Treatment (Advice to doctor)

Continue to monitor for pneumonia and pulmonary oedema.

Keep under medical supervision for at least 48 hours.

5. Firefighting measures

Suitable extinguishing media

Foam

Dry fire-extinguishing substance

Dry powder

Water spray jet

Extinguishing media which must not be used for safety reasons

Full water jet

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.

Special protective equipment for fire-fighters

Do not inhale explosion and/or combustion gases.

Additional information

Cool endangered containers with water spray jet.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.



6. Accidental release measures

Personal precautions

Ensure adequate ventilation.

Use personal protection.

Keep away sources of ignition.

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

Environmental precautions

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

Do not discharge into the subsoil/soil.

Methods for cleaning up

Send in suitable containers for recovery or disposal.

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

! 7. Handling and storage

Advice on safe handling

Care for thoroughly room ventilation, if necessary use in well ventilated area with local exhaust ventilation at workplace.

Use solvent-resistant equipment.

Keep limited supplies at workplace.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking

Vapours can form an explosive mixture with air.

Take precautionary measures against static discharges.

Requirements for storage rooms and vessels

Keep in closed 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.

Keep in a cool place, heat causes increase in pressure and risk of bursting.

Information on storage stability

Storage time: 24 months.

! 8. Exposure controls/personal protection

Additional advice on system design

Technical exhaustion if there is a long-term exposition

! Additional advice

Hand protection

Gloves (solvent-resistant)

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.

Eye protection

tightly fitting goggles

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.

!9. Physical and chemical properties

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

	Value	Temperature	at	Method	Remark
pH value in delivery state					not applicable
boiling range	98 - 102 °C			DIN 51751	
melting point	-103 °C				
Flash point	-14 °C			DIN 51755	
Ignition temperature	420 °C			DIN 51794	
Autoignition					no
Lower explosion limit	0,7 Vol-%				
Upper explosion limit	7,5 Vol-%				
Vapour pressure	53 hPa	20 °C			
Density	0,697 - 0,71 g/cm ³	15 °C		DIN 51757	
Solubility in water		20 °C			insoluble
Viscosity kinematic	0,572 mm ² /s	38 °C		DIN 51550	
Viscosit dynamic	0,51 mPa*s	22 °C			
Solvent concentration	100 %				

! Oxidizing properties

no

! Additional information

Vapours are heavier than air.

!10. Stability and reactivity**Conditions to avoid**

Evolution of highly flammable gases/vapours.

Materials to avoid

Reactions with strong oxidising agents.

! Hazardous decomposition products

No decomposition if used as directed.



11. Toxicological information

Acute toxicity/Irritability/Sensitization

	Value/Validation	Species	Method	Remark
LD50 acute oral	> 2000 mg/kg	rat		
LC50 acute inhalation	24,4 mg/l (4 h)			
Irritability skin	irritant			
Irritability eye	low irritant			
Skin sensitization	non-sensitizing			

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
Physico-chemical degradability	100 %		Activated charcoal adsorption	

Ecotoxicological effects

	Value	Species	Method	Validation
Fish	LC50 ca. 100 mg/l (96 h)			

Additional ecological information

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

General regulation
Do not allow uncontrolled leakage of product into the environment.

13. Disposal considerations

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 91/689/EEC on hazardous waste.

Recommendations for the product

For recycling consult manufacturer.
Material recycling possible.
Incinerate in suitable incineration plant, but care for official regulations.

Recommendations for packaging

Packaging that cannot be cleaned should be disposed of like the product.



! 14. Transport information

! Land and inland navigation transport ADR/RID

UN 3295 HYDROCARBONS, LIQUID, N.O.S., 3, II, (D/E)

Marine transport IMDG

UN 3295 HYDROCARBONS, LIQUID, N.O.S., 3, II

Air transport ICAO/IATA-DGR

UN 3295 HYDROCARBONS, LIQUID, N.O.S., 3, II

! 15. Regulatory information

VOC standard

VOC content

100 %

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

R 11 Highly flammable.

R 38 Irritating to skin.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 65 Harmful: may cause lung damage if swallowed.

R 67 Vapours may cause drowsiness and dizziness.

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

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