

according to Regulation (EC) No 1907/2006

THERMOSHIELD SHINE

Revision date: 13.02.2023

Product code: 00320-0231-GHS

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

1.1. Product identifier

THERMOSHIELD SHINE

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

Use of the substance/mixture

Rinsing agent for the mechanical preparation of instruments

1.3. Details of the supplier of the safety data sheet

Company name:	Dr. Schumacher GmbH	
Street:	Am Roggenfeld 3	
Place:	34323 Malsfeld / DEUTSCHLAND	
Telephone:	+49 (0) 5664/9496-0	Telefax:+49 (0) 5664/8444
e-mail:	post@schumacher-online.com	
Internet:	www.schumacher-online.com	
Responsible Department:	Responsible for the safety data sheet:	sds@gbk-ingelheim.de
1.4. Emergency telephone	INTERNATIONAL: +49 - (0) 6132 - 844	463, GBK GmbH (24h - 7d/w - 365d/a)
<u>number:</u>	In England and Wales: NHS 111 In Sc	otland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories: Corrosive to metals: Met. Corr. 1 Skin corrosion/irritation: Skin Corr. 1C Serious eye damage/eye irritation: Eye Dam. 1 Hazard Statements: May be corrosive to metals. Causes severe skin burns and eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Citric acid

Signal word:

Pictograms:



Hazard statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
Precautionary statemer	nts
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

P310



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P390	Absorb spillage to prevent material damage.	
P406	Store in a corrosion-resistant container with a resistant inner liner.	
P501	Dispose of contents/container to approved disposal company or local collection.	
Additional advice on lal	belling	
Classification and lab value).	pelling according to Regulation (EC) No 1272/2008 Annex I paragraph 3.2.3.3.4.2 (pH	

2.3. Other hazards

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aqueous solution

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
77-92-9	Citric acid			< 10 %
	201-069-1	607-750-00-3	01-2119457026-42	
	Eye Irrit. 2, STOT SE 3; H319 H335	5		
15763-76-5	Sodium cumenesulphonate			< 5 %
	239-854-6		01-2119489411-37	
	Eye Irrit. 2; H319			
501019-90-5	Alpha epoxides, C10 alkyl, reaction	products with oxo alcohol C11, ethe	oxylated	< 5 %
	Eye Irrit. 2, Aquatic Chronic 3; H31	9 H412		
	Fatty alcohol alcoxylate			< 5 %
			02-2119552554-37	
	Acute Tox. 4, Eye Irrit. 2, Aquatic C	hronic 3; H302 H319 H412		

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. L	imits, M-factors and ATE	
15763-76-5	239-854-6	Sodium cumenesulphonate	< 5 %
	inhalation: LC5 mg/kg	0 = >20 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2000	
		Fatty alcohol alcoxylate	< 5 %
	oral: ATE = 500) mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures



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General information

Remove contaminated soaked clothing immediately. If you feel unwell, seek medical advice.

After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products. In the event of symptoms refer for medical treatment.

After contact with skin

In case of contact with skin wash off with water. Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Summon a doctor immediately. Induce vomiting only upon the advice of a physician.

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

Causes severe skin burns and eye damage.

Ingestion causes burns of the upper digestive and respiratory tracts.

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

Treat symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Product does not burn, fire-extinguishing activities according to surrounding. Foam, carbon dioxide (CO2), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

Fire may produce:

carbon monoxide and carbon dioxide

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Cool containers at risk with water spray jet. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ensure adequate ventilation.

Keep away noninvolved persons.

For non-emergency personnel

Do not breathe vapours. Avoid contact with skin, eyes and clothing.



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For emergency responders

Use personal protective clothing. In case of vapour formation use respirator.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

For cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Shovel into suitable container for disposal. Do not use metal containers.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8). Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed. Do not breathe vapours. Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

No special protective measures against fire required.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a dry, well-ventilated place. Keep only in original container. Do not use metal containers.

Hints on joint storage

Incompatible with bases.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Rinsing agent for the mechanical preparation of instruments

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

No data available

8.2. Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothes before re-use.



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Eye/face protection

Tightly fitting goggles (EN 166). Eye wash bottle with pure water (EN 15154).

Hand protection

Also suitable are gloves made of: Natural rubber (NR; 0,5 mm): Breakthrough time > 8 h Polychloropren - CR (0,5 mm): Breakthrough time > 8 h Nitrile rubber/nitrile latex - NBR (0,35 mm): Breakthrough time > 8 h Butyl rubber - Butyl (0,5 mm): Breakthrough time > 8 h Fluoro-rubber - FKM (0.4 mm): Breakthrough time > 8 h Polyvinyl chloride - PVC (0.5 mm): Breakthrough time > 8 h This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions. Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection

Long sleeved clothing (DIN EN ISO 6530)

Respiratory protection

No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	Colourless	
Odour:	Characteristic	4.0
pH-Value (at 20 °C):		1,9
Changes in the physical state		
Melting point/freezing point:		n.d.
Boiling point or initial boiling point and boiling range:		n.d.
Softening point:		n.d.
Flash point:		n.a.
Sustaining combustion:		Not sustaining combustion
Flammability Solid/liquid:		n.a.
Explosive properties The product is not explosive.		
Lower explosion limits:		n.a.
Upper explosion limits:		n.a.
Auto-ignition temperature:		n.a.
Self-ignition temperature		
Solid:		n.a.
Gas:		n.a.
Decomposition temperature:		n.d.
Oxidizing properties Not oxidising.		
Vapour pressure:		n.d.



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Density (at 20 °C):	1,024 g/cm ³	
Bulk density:	n.a.	
Water solubility: (at 20 °C)	Miscible	
Solubility in other solvents n.d.		
Partition coefficient n-octanol/water:	n.d.	
Viscosity / dynamic:	n.d.	
Viscosity / kinematic:	n.d.	
Flow time:	n.d.	
Relative vapour density:	n.d.	
Evaporation rate:	n.d.	
Solvent separation test:	n.d.	
Solvent content:	0 %	
9.2. Other information		
No data available		

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with alkalies.

Reactions with metals, with evolution of hydrogen.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

Strong bases Metals

10.6. Hazardous decomposition products

Hydrogen, by reaction with metals. Fire may produce: carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No. 1272/2008

Acute toxicity

Based on available data, the classification criteria are not met. No toxicological data available.

Irritation and corrosivity

Causes severe skin burns and eye damage.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.



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STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Additional information on tests

Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information

Ingestion causes burns of the upper digestive and respiratory tracts.

SECTION 12: Ecological information

12.1. Toxicity

Ecological data are not available.

12.2. Persistence and degradability

Biodegradable.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

Low hazard to waters.

A pH-change becomes possible in water.

Further information

This concentrate is not allowed to be released into the sewerage, surface water or groundwater.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Where possible recycling is preferred to disposal. Can be incinerated, when in compliance with local regulations.

List of Wastes Code - residues/unused products

200129 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS; separately collected fractions (except 15 01); detergents containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging



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Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

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

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

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	UN 3265
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Citric acid)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C3
Limited quantity:	5 L / 30 kg
Excepted quantity: Transport category:	E1 3
Hazard No:	80
Tunnel restriction code:	E
Inland waterways transport (ADN)	
14.1. UN number:	UN 3265
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Citric acid)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C3
Limited quantity:	5 L / 30 kg
Excepted quantity:	E1
Marine transport (IMDG)	
14.1. UN number:	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Citric acid) 8
14.3. Transport hazard class(es):	o III
14.4. Packing group:	
Hazard label:	8
Marine pollutant:	No
Limited quantity:	5 L / 30 kg
Excepted quantity:	E1
EmS:	F-A, S-B



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Air transport (ICAO-TI/IATA-DGR)		
14.1. UN number:	UN 3265	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (Citric acid)	
14.3. Transport hazard class(es):	8	
14.4. Packing group:	III	
Hazard label:	8	
	B	
Limited quantity Passenger:	1L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	852	
IATA-max. quantity - Passenger: IATA-packing instructions - Cargo:	5 L	
IATA-packing instructions - Cargo. IATA-max. quantity - Cargo:	856 60 L	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	Νο	
14.6. Special precautions for user Take the usual precautions when hand 14.7. Maritime transport in bulk according to The transport takes place only in appr	o IMO instruments	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental requ	lations/legislation specific for the substance or mixture	
EU regulatory information		
Restrictions on use (REACH, annex XVII) Entry 3, Entry 75	:	
2004/42/EC (VOC):	0 %	
Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)	
National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juve work protection guideline' (94/33/EC). Observe employment restriction	
	under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.	
Water hazard class (D):	under the Maternity Protection Directive (92/85/EEC) for expectant or	

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Changes

Changes in section: 2, 6, 9, 10, 11, 12, 16



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Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

- RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
- ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
- IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
- CAS = Chemical Abstract Service
- EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

The provision of the safety data sheet does not automatically guarantee the marketability of the product. (n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)