

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 1 of 10

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

ZincMax 400 ml

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

Special finishes

1.3. Details of the supplier of the safety data sheet

Company name: KERONA GmbH
ZINC MAX
Street: Zeilbaumweg 15
Place: D-74613 Öhringen
Telephone: +49 7941-9205 4080
e-mail: mail@kerona.de
Contact person: Dr. Hans Götz
e-mail: hans.goetz@kerona.de
Internet: www.kerona.de

Telephone: +49 170-8548 710

1.4. Emergency telephone number:

+49 761-19 240

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Aerosol: Aerosol 1

Acute toxicity: Acute Tox. 4

Aspiration hazard: Asp. Tox. 1

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Extremely flammable aerosol.

Pressurised container: May burst if heated.

Harmful if inhaled.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation.

May cause drowsiness or dizziness.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008****Hazard components for labelling**

2-methylpentane
@000000000392
titan butoxide
ethylbenzene

Safety Data Sheet

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 2 of 10

Signal word: Danger**Pictograms:****Hazard statements**

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 3 of 10

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
107-83-5	2-methylpentane			10 - < 20 %
	203-523-4	601-007-00-7		
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
1330-20-7	xylene			10 - < 20 %
	215-535-7	601-022-00-9		
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H332 H312 H315 H319 H335 H373 H304			
5593-70-4	titan butoxide			10 - < 20 %
	227-006-8		01-2119967423-33	
	Flam. Liq. 3, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, STOT SE 3; H226 H315 H318 H335 H336			
7440-66-6	zinc powder - zinc dust (stabilised)			10 - < 20 %
	231-175-3	030-001-01-9		
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
100-41-4	ethylbenzene			0.1 - < 5 %
	202-849-4	601-023-00-4		
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304			
108-88-3	toluene			0.1 - < 5 %
	203-625-9	601-021-00-3		
	Flam. Liq. 2, Repr. 2, Skin Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H225 H361d H315 H336 H373 H304			

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

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). First aider: Pay attention to self-protection! Move victim out of danger zone. Never give anything by mouth to an unconscious person or a person with cramps. Take off immediately all contaminated clothing.

After inhalation

In all cases of doubt, or when symptoms persist, seek medical advice. Remove casualty to fresh air and keep warm and at rest. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration.

After contact with skin

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Medical treatment necessary.

After contact with eyes

Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing. In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.



Safety Data Sheet

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 4 of 10

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

No data available

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂), Dry extinguishing powder, Foam.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire and/or explosion do not breathe fumes.

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not inhale explosion and combustion gases. Heating causes rise in pressure with risk of bursting.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. Keep away from sources of ignition - No smoking. Flammable vapours can accumulate in head space of closed systems. Caution! Transport usually takes place at temperatures above the flash point.

Advice on protection against fire and explosion

Take precautionary measures against static discharges. Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Material, oxygen-rich, oxidizing. Pyrophoric or self-heating substances.

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 5 of 10

8.1. Control parameters**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7429-90-5	Aluminium metal, respirable dust	-	4		TWA (8 h)	WEL
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
108-88-3	Toluene	50	191		TWA (8 h)	WEL
		100	384		STEL (15 min)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

PNEC values

CAS No	Substance	Value
	Environmental compartment	
5593-70-4	titan butoxide	
	Freshwater	0,08 mg/l
	Freshwater sediment	0,067 mg/kg

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Avoid contact with skin, eyes and clothes. When using do not eat or drink. Wash hands before breaks and after work. Draw up and observe skin protection programme.

Eye/face protection

Wear eye/face protection.

Hand protection

Hand protection Viton. > 240 min

Skin protection

Wear anti-static footwear and clothing

Environmental exposure controls

Do not allow to enter into surface water or drains.

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

Physical state: Aerosol
Colour: silver grey

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 6 of 10

Odour: characteristic

Changes in the physical state

Initial boiling point and boiling range:	-42 °C
Flash point:	-104 °C
Lower explosion limits:	1,0 vol. %
Upper explosion limits:	9,4 vol. %
Ignition temperature:	300 °C
Vapour pressure:	3.300 hPa
Density (at 20 °C):	0,757 g/cm ³

SECTION 10: Stability and reactivity**10.1. Reactivity**

No data available

10.2. Chemical stability

The product develops hydrogen in an aqueous solution in contact with metals.

10.3. Possibility of hazardous reactions

Does not decompose when used for intended uses. Vapours may form explosive mixtures with air. Heating causes rise in pressure with risk of bursting.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials

Materials to avoid: Oxidizing agents. Acid. alkali.

10.6. Hazardous decomposition productsHazardous decomposition products: Carbon dioxide (CO₂). Carbon monoxide Nitrogen oxides (NO_x)**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Harmful if inhaled.

ATEmix calculated

ATE (inhalation aerosol) 4,515 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1330-20-7	xylene				
	dermal	ATE 1100 mg/kg			
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			
100-41-4	ethylbenzene				
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			

Irritation and corrosivity

Causes skin irritation.

Causes serious eye damage.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 7 of 10

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.

STOT-single exposure

May cause respiratory irritation. (xylene; titan butoxide)

May cause drowsiness or dizziness. (2-methylpentane; titan butoxide)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (xylene)

Aspiration hazard

May be fatal if swallowed and enters airways.

Specific effects in experiment on an animal

No data available

Practical experience**Observations relevant to classification**

May be harmful if swallowed, in contact with skin or if inhaled.

SECTION 12: Ecological information**12.1. Toxicity**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 8 of 10

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0
Transport category:	2
Tunnel restriction code:	D

Inland waterways transport (ADN)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2
14.4. Packing group:	-
Hazard label:	2.1
Classification code:	5F
Special Provisions:	190 327 344 625
Limited quantity:	1 L
Excepted quantity:	E0

Marine transport (IMDG)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1
Special Provisions:	63, 190, 277, 327, 344, 959
Limited quantity:	1000 mL
Excepted quantity:	E0
EmS:	F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:	UN 1950
14.2. UN proper shipping name:	AEROSOLS, flammable
14.3. Transport hazard class(es):	2.1
14.4. Packing group:	-
Hazard label:	2.1
Special Provisions:	A145 A167 A802
Limited quantity Passenger:	30 kg G
Passenger LQ:	Y203
Excepted quantity:	E0
IATA-packing instructions - Passenger:	203

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 9 of 10

IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 29: butane

Entry 48: toluene

2010/75/EU (VOC): 85%; 640 g/l

2004/42/EC (VOC): 640 g/l

Subcategory according to Directive 2004/42/EC: Special finishes - All types, VOC limit value: 840 g/l

National regulatory information

Employment restrictions: Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Observe employment restrictions for women of child-bearing age.

Water hazard class (D): 3 - strongly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information**Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]**

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Acute Tox. 4; H332	Bridging principle "Aerosols"
Asp. Tox. 1; H304	Calculation method
Skin Irrit. 2; H315	Bridging principle "Aerosols"
Eye Dam. 1; H318	Bridging principle "Aerosols"
STOT SE 3; H335	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"
STOT RE 2; H373	Bridging principle "Aerosols"
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H222 Extremely flammable aerosol.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H229 Pressurised container: May burst if heated.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H361d Suspected of damaging the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

ZincMax 400 ml

Revision date: 29.01.2020

Product code: 90523

Page 10 of 10

H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Coatings and paints, thinners, paint removers	-	-	9a	7, 11	11a	7, 7a	91	

LCS: Life cycle stages

SU: Sectors of use

PC: Product categories

PROC: Process categories

ERC: Environmental release categories

AC: Article categories

TF: Technical functions

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