



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

Identification of the substance or preparation

TIP TOP COROFLAKE ZINC HARDENER

Art.-No.:

590 3050

Use of the substance/preparation

Hardener for primer Coat

Company/undertaking identification

TIP TOP Oberflächenschutz Elbe GmbH

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Responsible Department

Emergency telephone : ++49 (0) 6132 / 84463 (GBK Gefahrgut Buero GmbH, Ingelheim)

Responsible for the safety data sheet: sds@gbk-ingelheim.de

2. Hazards identification

Classification

Indications of danger : Highly flammable, Harmful

R-phrases :

Highly flammable.

Harmful by inhalation and in contact with skin.

Irritating to skin.

Risk of serious damage to eyes.

3. Composition/information on ingredients

Chemical characterization

(Mixture)

Preparation in organic solvents

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
215-535-7	1330-20-7	Xylene (mixed isomers)	< 30 %	Xn, Xi R10-20/21-38
	68410-23-1	Polyaminoamide	< 30 %	Xi R41
203-539-1	107-98-2	1-Methoxy-2-propanol	< 20 %	R10
203-550-1	108-10-1	4-Methylpentan-2-one	< 20 %	F, Xn, Xi R11-20-36/37-66

Full text of each relevant R phrase can be found in heading 16.

4. First aid measures

General information

Remove contaminated soaked clothing immediately.

In the event of persistent symptoms receive medical treatment.

Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.

In the event of symptoms refer for medical treatment.



After contact with skin

Wash off immediately with soap and plenty of water.

Treat subsequently with skin cream.

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

Induce vomiting only upon the advice of a physician.

Immediately give plenty of water (if possible charcoal slurry).

Attention. Beware, danger of aspiration.

Do not induce vomiting.

Summon a doctor immediately.

5. Fire-fighting measures

Suitable extinguishing media

Alcohol-resistant foam, dry chemical, carbon dioxide (CO₂), water-spray.

Extinguishing media which must not be used for safety reasons

Full water jet

Special exposure hazards arising from substance or preparation itself, combustion products, resulting gases

Fire may produce:

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x)

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Protective suit

Additional information

Vapours are heavier than air and spread along ground.

The vapour/air mixture is explosive, even in empty, uncleaned receptacles.

Cool containers at risk 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

In case of vapour formation use respirator.

Use only explosion-proof equipment.

Ensure adequate ventilation.

Use personal protective clothing.

Keep away sources of ignition.

Environmental precautions

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

Methods for cleaning up/taking up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

Additional information

Clean contaminated surface thoroughly.



7. Handling and storage

Handling

Advice on safe handling

Keep container tightly closed.

Provide sufficient air exchange and/or exhaust in work rooms.

Avoid contact with skin, eyes and clothing.

Advice on protection against fire and explosion

Do not smoke - volatile.

Keep product and empty container away from heat and sources of ignition.

Pay attention to anti-explosion rules.

Take precautionary measures against static discharges.

Storage

Requirements for storage rooms and vessels

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

Advice on storage compatibility

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

Storageclass (VCI)

3 A

8. Exposure controls/personal protection

Exposure limit values

Exposure limits (EH40)

CAS-No.	Chemical name	ml/m ³	mg/m ³	F/ml	Category	Origin
107-98-2	1-Methoxypropan-2-ol	100	375		TWA (8 h)	WEL
	1-Methoxypropan-2-ol	150	560		STEL (15 min)	WEL
108-10-1	4-Methylpentan-2-one	50	208		TWA (8 h)	WEL
	4-Methylpentan-2-one	100	416		STEL (15 min)	WEL
1330-20-7	Xylene, o-, m-, p- or mixed isomers	50	220		TWA (8 h)	WEL
	Xylene, o-, m-, p- or mixed isomers	100	441		STEL (15 min)	WEL

Exposure controls

Occupational exposure controls

Ensure adequate ventilation, especially in confined areas.

Pay attention to explosion protection rules.

Protective and hygiene measures

Do not inhale vapours.

Avoid contact with eyes and skin.

Wash hands before breaks and immediately after handling the product.

When using, do not eat, drink or smoke.

Treat subsequently with skin cream.

Remove and wash contaminated clothing before re-use.

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A).

Hand protection



Chemical protective glove made of nitrile, nitrile/cotton, butyl or neoprene, with a minimum thickness of 0.7 mm, permeation time of approx. 480 minutes.

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.

Pls. find examples in the protective gloves database under: <http://bestglove.com/site/chemrest/>

Eye protection

Eye wash bottle with pure water.

Tightly fitting goggles

Skin protection

Long sleeved clothing.

9. Physical and chemical properties**General information**

Physical state	Liquid
Colour	Yellowish
Odour	Aromatic - Like ketone

Important health, safety and environmental information

Test method

Changes in the physical state

Flash point	< 21 °C
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Flammability

Lower explosion limits	n.d.
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Ignition temperature	n.d.
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Vapour pressure :	n.d.
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at (20 °C)

Density (at 20 °C) :	0,87 - 0,93 g/cm ³
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Water solubility :	Immiscible
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at (20 °C)

Viscosity / dynamic :	20 - 60 mPa·s
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Solvent content

< 70 %

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

To avoid thermal decomposition, do not overheat.

Vapours may form explosive mixture with air.

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x)

Additional information

No decomposition if stored and applied as directed.

11. Toxicological information



Empirical data on effects on humans

Harmful by inhalation and in contact with skin.

Irritating to skin.

Risk of strong eye injuries.

Inhalation of vapours in high concentration can cause narcotic effects.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Inhalation of high vapour concentration may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

12. Ecological information

Further information

Do not flush into surface water or sanitary sewer system.

Hazard to waters

13. Disposal considerations

Advice on disposal

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other dangerous substances

Classified as hazardous waste.

Contaminated packaging

Contaminated packagings are to be treated like the product itself.

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

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

14. Transport information

Land transport (ADR/RID)

ADR/RID class	3
Classification code :	F1
Hazard-no.	33
UN number	1993
Hazard label	3
ADR/RID packing group	II
Limited quantity	LQ 4

Description of the goods

FLAMMABLE LIQUID, N.O.S. (Xylene (mixed isomers), 4-Methylpentan-2-one)

Other applicable information (land transport)

LQ 4: combination packaging: 3 l / 30 kg (total gross mass); trays: 1 l / 20 kg (total gross mass).

Tunnel restriction code: D/E

Transport category: 2



Inland waterways transport

Marine transport

IMDG code	3
UN number	1993
Marine pollutant	No
EmS	F-E; S-E
IMDG packing group	II
Limited quantity :	1 L / 30 kg
Hazard label	3

Description of the goods

FLAMMABLE LIQUID, N.O.S. (xylene, 4-methyl-pentan-2-one)

Other applicable information (marine transport)

Limited quantities (chapter 3.4): combination packaging: 1 l / 30 kg (total gross mass); trays: 1 l / 20 kg (total gross mass)

Air transport

ICAO/IATA-DGR	3
UN/ID number	1993
Hazard label	3
IATA-packing instructions - Passenger	305
IATA-max. quantity - Passenger	5 L
IATA-packing instructions - Cargo	307
IATA-max. quantity - Cargo	60 L
ICAO packing group	II
Limited quantity Passenger	Y 305 / 1 L

Description of the goods

FLAMMABLE LIQUID, N.O.S. (xylene, 4-methyl-pentan-2-one)

15. Regulatory information

Labelling

Additional advice on labelling According to EC-regulations the product is to be labelled as follows:

Indication of danger F - Highly flammable; Xn - Harmful

Hazardous component(s) to be indicated on label

Xylene (mixed isomers)

R phrases

- | | |
|-------|---|
| 11 | Highly flammable. |
| 20/21 | Harmful by inhalation and in contact with skin. |
| 38 | Irritating to skin. |
| 41 | Risk of serious damage to eyes. |

S phrases

- | | |
|-------|---|
| 09 | Keep container in a well-ventilated place. |
| 16 | Keep away from sources of ignition - No smoking. |
| 23 | Do not breathe vapour . |
| 26 | In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| 29/35 | Do not empty into drains; dispose of this material and its container in a safe way. |
| 36/37 | Wear suitable protective clothing and gloves. |

National regulatory information

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

TIP TOP Oberflächenschutz Elbe GmbH

Revision date : 21.07.2009

Revision no. : 1,00

TIP TOP COROFLAKE ZINC HARDENER

00359-1047



Employment restrictions	Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.
Water contaminating class (D) 1999/13/EC (VOC)	2 - water contaminating < 70 %

16. Other information

Full text of R-phrases referred to under sections 2 and 3

10	Flammable.
11	Highly flammable.
20	Harmful by inhalation.
20/21	Harmful by inhalation and in contact with skin.
36/37	Irritating to eyes and respiratory system.
38	Irritating to skin.
41	Risk of serious damage to eyes.
66	Repeated exposure may cause skin dryness or cracking.

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.

"(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.)