

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347



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

Identification of the substance or preparation

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

Art.-No.:

580 1010

Use of the substance/preparation

Hardener

Company/undertaking identification

REMA TIP TOP GmbH

Gruber Straße 63

D-85586 Poing

Telephone : ++49 (0) 8121 / 707 - 0

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 : Harmful, Dangerous for the environment

R-phrases:

Flammable.

Harmful by inhalation and in contact with skin.

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

3. Composition/information on ingredients

Chemical characterization (Mixture)

Polyaminoamide

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
215-535-7	1330-20-7	Xylene (mixed isomers)	12,5 - 20 %	Xn, Xi R10-20/21-38
203-539-1	107-98-2	1-Methoxy-2-propanol	10 - 12,5 %	R10-67
203-550-1	108-10-1	4-Methylpentan-2-one	2,5 - 5 %	F, Xn, Xi R11-20-36/37-66
215-222-5	1314-13-2	Zinc oxide	2,5 - 5 %	N R50-53
265-199-0	64742-95-6	Solvent naphta (petroleum)	2,5 - 5 %	Xn, Xi, N R10-37-51-53-65-66-67

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

Further Information

According to note P to the regulation (EC) no. 1272/2008, "Solvent naphta (petroleum)" is not to be classified as "carcinogenic" or "mutagen" ingredient because a benzene content (EINECS No. 200-753-7) is below 0.1 % by weight.

4. First aid measures

General information

Remove contaminated soaked clothing immediately.

Take away from danger area and lay down affected person.

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347



After inhalation

Move to fresh air in case of accidental inhalation of vapours or decomposition products.

Keep warm and calm injured person.

If patient is not breathing, apply artificial respiration.

Seek medical treatment immediately.

After contact with skin

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

Do not use solvents or thinners.

After contact with eyes

Remove contact lens.

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 mouth.

Never give anything by mouth to an unconscious person.

Summon a doctor immediately.

Induce vomiting only upon the advice of a physician.

Advice to doctor

Attention. Beware, danger of aspiration.

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).

High smoke development

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and 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.

Keep away sources of ignition.

Use only explosion-proof equipment.

Ensure adequate ventilation.

Remove persons to safety.

Use personal protective clothing.

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347



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

Do not wear contact lenses when handling the product.

Keep container tightly closed.

Vapours are heavier than air and spread along ground.

Keep a good ventilation and air-exhaust at the place of work.

Do not empty container under pressure. No pressure tank!

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

Do not smoke.

Take precautionary measures against static discharges.

Use only explosion-proof equipment.

Storage

Requirements for storage rooms and vessels

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

Pay attention to anti-explosion rules.

Take precautionary measures against static discharges.

Storage temperature between 15°C to 30°C

Advice on storage compatibility

Incompatible with:

Strong oxidizing agents.

Strong acids and strong bases.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

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
		150	560		STEL (15 min)	WEL
108-10-1	4-Methylpentan-2-one	50	208		TWA (8 h)	WEL
		100	416		STEL (15 min)	WEL
1330-20-7	Xylene, o-, m-, p- or mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Occupational exposure controls

Ensure adequate ventilation, especially in confined areas.

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347



Protective and hygiene measures

Do not inhale vapours.

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.

Respiratory protection

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

Hand protection

Protective gloves resistant to chemicals made of nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Camatril Velours 730> made by www.kcl.de.

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.

Eye protection

Tightly fitting goggles.

Skin protection

Solvent-resistant apron.

9. Physical and chemical properties

General information

Physical state : Liquid
Colour : Various
Odour : Characteristic

Important health, safety and environmental information

Changes in the physical state

Flash point : 28 °C DIN 53213
Lower explosion limits : 1,5 vol. %
Upper explosion limits : 11,5 vol. %
Vapour pressure : 2,7 hPa
(at 20 °C)
Density (at 20 °C) : 1,40 g/cm³
Water solubility : Partially miscible

Solvent separation test

< 3 %

Solvent content

35 %

Other information

Ignition temperature : 270 °C

10. Stability and reactivity

Conditions to avoid

To avoid thermal decomposition, do not overheat.

Vapour/air mixtures are explosive at intensive warming.

Heating can release vapours which can be ignited.

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347



Materials to avoid

Strong oxidizing agents.

Strong acids and strong bases.

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.

Inhalation of high vapour concentrations 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.

Components of the product may be absorbed into the body through the skin.

Contact with eyes may cause irritation.

Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

Attention. Beware, danger of aspiration!

Further information

No toxicological data available.

Classification in compliance with the assessment procedure specified in the EC guidelines 1999/45/EG.

12. Ecological information

Further information

Do not flush into surface water or sanitary sewer system.

Hazardous water pollutant.

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

Ecological data are not available.

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

080111 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU and removal of paint and varnish; waste paint and varnish containing organic solvents or other dangerous substances
Classified as hazardous waste.

Contaminated packaging

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.

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

14. Transport information

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347

**Land transport (ADR/RID)**

UN number : 1263
ADR/RID class : 3
Classification code : F1
Warning plate
Hazard-no. : 30
Hazard label : 3
ADR/RID packing group : III
Limited quantity : LQ7

Description of the goods

Paint

Other applicable information (land transport)

LQ 7: combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

Tunnel restriction code: D/E

Transport category: 3

Additional label with symbol "fish and tree" according to subsection 5.2.1.8.3. ADR for single packagings and inner packagings with > 5 kg or 5 L, transition period ends 31.12.2010.

Marine transport

UN number : 1263
IMDG code : 3
Marine pollutant : No
Hazard label : 3
IMDG packing group : III
EmS : F-E, S-E
Limited quantity : 5 L / 30 kg

Description of the goods

PAINT

Other applicable information (marine transport)

Limited quantities (section 3.4): combination packaging: 5 l / 30 kg (total gross mass); trays: 5 l / 20 kg (total gross mass).

Additional label with symbol "fish and tree" according to subsection 5.2.1. IMDG Code for single packagings and inner packagings with > 5 kg or 5 L.

Air transport

UN/ID number : 1263
ICAO/IATA-DGR : 3
Hazard label : 3
ICAO packing group : III
Limited quantity Passenger : Y309 / 10 L
IATA-packing instructions - Passenger : 309
IATA-max. quantity - Passenger : 60 L
IATA-packing instructions - Cargo : 310
IATA-max. quantity - Cargo : 220 L

Description of the goods

PAINT

15. Regulatory information

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00

TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347



Labelling

Additional advice on labelling

According to EC-regulations the product is to be labelled as follows:

Danger symbols : Xn - Harmful; N - Dangerous for the environment



Xn - Harmful



N - Dangerous for the environment

Hazardous components which must be listed on the label

Xylene (mixed isomers)

R phrases

- 10 Flammable.
- 20/21 Harmful by inhalation and in contact with skin.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S phrases

- 23 Do not breathe vapour.
- 38 In case of insufficient ventilation, wear suitable respiratory equipment.
- 51 Use only in well-ventilated areas.
- 61 Avoid release to the environment. Refer to special instructions / Safety data sheets.
- 36/37 Wear suitable protective clothing and gloves.

EU regulatory information

1999/13/EC (VOC) : 483 g/l

National regulatory information

Employment restrictions : Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D) : 2 - water contaminating

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.
- 37 Irritating to respiratory system.
- 38 Irritating to skin.
- 50 Very toxic to aquatic organisms.
- 51 Toxic to aquatic organisms.
- 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- 53 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.

Further Information

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

REMA TIP TOP GmbH

Revision date: 28.06.2010

Revision no.: 1,00



TIP TOP ECLON-EP-2K-DS-HARDENER V-5795 for ECLON-EP-2K-DS-STEEL PRIMER

00156-0347

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.)