REMA TIP TOP GmbH

Revision date: 09.03.2010 Revision no.: 1,05



00156-0245



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

Identification of the substance or preparation

TIP TOP HEATING SOLUTION T4, free of chlorinated and aromatic hydrocarbons

Art.-No.:

538 1377; 538 1676; 538 1683, 538 1360, 538 1361, 538 1690

Use of the substance/preparation

Adhesive

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: Highly flammable, Irritant, Dangerous for the environment

R-phrases:

Highly flammable. Irritating to skin.

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

Vapours may cause drowsiness and dizziness.

3. Composition/information on ingredients

Chemical characterization (Mixture)

Preparation solved in petroleum spirit

Hazardous components

EC-No.	CAS-No.	Chemical name	Quantity	Classification
265-151-9	64742-49-0	Naphtha (petroleum)	< 85 %	F, N, Xi, Xn R11-38-51-53-65-67
215-222-5	1314-13-2	zinc oxide	< 1 %	N R50-53
215-267-0	1317-36-8	Lead(II)-oxide		Repr. Cat. 1, Repr. Cat. 3, Xn, N R61-62-20/22-33-50-53

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, "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

GB - EN Page 1 of 7

REMA TIP TOP GmbH

Revision date: 09.03.2010 Revision no.: 1,05

TIP TOP HEATING SOLUTION T4, free of chlorinated and aromatic hydrocarbons

00156-0245

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.

Seek medical treatment immediately.

After contact with skin

Wash off 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.

Summon a doctor immediately.

After ingestion

Induce vomiting only upon the advice of a physician.

Attention. Beware, danger of aspiration.

Do not induce vomiting.

Summon a doctor immediately.

5. Fire-fighting measures

Suitable extinguishing media

Foam, carbon dioxide (CO2), dry chemical, 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 (NOx).

Special protective equipment for fire-fighters

Use breathing apparatus with independent air supply.

Protective suit.

Additional information

Cool containers at risk with water spray jet.

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

Vapours are heavier than air and spread along ground.

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.

Ensure adequate ventilation.

Remove persons to safety.

Use personal protective clothing.

Keep away sources of ignition.

Avoid contact with skin, eyes and clothing.

Environmental precautions

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



GB - EN Page 2 of 7

REMA TIP TOP GmbH

Revision date: 09.03.2010 Revision no.: 1,05



00156-0245



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

Shovel into suitable container for disposal.

7. Handling and storage

Handling

Advice on safe handling

Keep container tightly closed.

Use only in thoroughly ventilated areas.

Vapours are heavier than air and spread along ground.

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 protection rules.

Advice on storage compatibility

Incompatible with oxidizing agents.

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/m³	mg/m³	F/ml	Category	Origin
1314-13-2	Zinc oxide, fume (OLD)	-	5		TWA (8 h)	OES
		-	10		STEL (15 min)	OES

Occupational exposure controls

Pay attention to anti-explosion protection rules.

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.

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).



GB - EN Page 3 of 7

REMA TIP TOP GmbH

Revision date: 09.03.2010 Revision no.: 1,05

TIP TOP HEATING SOLUTION T4, free of chlorinated and aromatic hydrocarbons

00156-0245

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 : Black

Odour: Hydrocarbon-like

Important health, safety and environmental information

Changes in the physical state

Boiling point: 60 - 95 °C
Flash point: < -20 °C
Lower explosion limits: 1,1 vol. %
Upper explosion limits: approx. 8 vol. %
Vapour pressure: 180 hPa

(at 20 °C)

Density: < 1 g/cm³
Water solubility: Immiscible

(at 20 °C)

Viscosity / dynamic : approx. 1300 mPa·s

Solvent content

< 85 %

Other information

Ignition temperature : 260 °C

10. Stability and reactivity

Conditions to avoid

To avoid thermal decomposition, do not overheat.

Heating can release vapours which can be ignited.

Vapour/air-mixtures are explosive at intense warming.

Materials to avoid

Oxidizing agents.

Hazardous decomposition products

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

Additional information

No decomposition if stored and applied as directed.

GB - EN Page 4 of 7

REMATIP TOP GmbH

Revision date: 09.03.2010 Revision no.: 1,05

TIP TOP HEATING SOLUTION T4, free of chlorinated and aromatic hydrocarbons

00156-0245



11. Toxicological information

Empirical data on effects on humans

Irritating to skin.

Vapours may cause drowsiness and dizziness.

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

A longer or repeated contact my lead to irritation of eyes and mucous membranes.

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

Lead has cumulative properties, wherefore lead compounds can be health-damaging in the event of long-term or frequent exposure. Following symptoms are resulting from chronic lead uptake: fatigue, headaches, constipation and colic.

Lead compounds are classified in category 1 and 3 as reprotoxic (toxic effects on reproduction).

12. Ecological information

Further information

Do not flush into surface water or sanitary sewer system.

Low hazard to waters.

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

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

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.

14. Transport information

Land transport (ADR/RID)

UN number :	1133
ADR/RID class :	3
Classification code :	F1
Warning plate	
Hazard-no.:	33
Hazard label :	3
ADR/RID packing group :	II
Limited quantity:	LQ 6

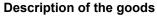
GB - EN Page 5 of 7

REMA TIP TOP GmbH

Revision date: 09.03.2010 Revision no.: 1,05

TIP TOP HEATING SOLUTION T4, free of chlorinated and aromatic hydrocarbons

00156-0245



Adhesives

Other applicable information (land transport)

LQ 6: combination packaging: 5 I / 30 kg (total gross mass); trays: 1 I / 20 kg (total gross mass).

Tunnel restriction code: D/E Transport category: 2

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 : 1133 IMDG code : 3 Marine pollutant : No IMDG packing group : II

EmS: F-E; S-D Limited quantity: 5 L / 30 kg

Description of the goods

ADHESIVES

Other applicable information (marine transport)

Limited quantities (section 3.4): combination packaging: 5 I / 30 kg (total gross mass); trays: 5 I / 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: 1133 ICAO/IATA-DGR: 3 Hazard label: 3 ICAO packing group: II

Limited quantity Passenger: Y305 / 1 L

IATA-packing instructions - Passenger : 305
IATA-max. quantity - Passenger : 5 L
IATA-packing instructions - Cargo : 307
IATA-max. quantity - Cargo : 60 L

Description of the goods

ADHESIVES

15. Regulatory information

Labelling

Additional advice on labelling

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

Danger symbols : F - Highly flammable; Xi - Irritant; N - Dangerous for the environment

Xi

N

F - Highly flammable

Xi - Irritant

N - Dangerous for the environment

GB - EN Page 6 of 7

REMATIP TOP GmbH

Revision date: 09.03.2010 Revision no.: 1,05

TIP TOP HEATING SOLUTION T4, free of chlorinated and aromatic hydrocarbons

00156-0245



Highly flammable.Irritating to skin.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Vapours may cause drowsiness and dizziness.

S phrases

16 Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

This material and its container must be disposed of in a safe way.

61 Avoid release to the environment. Refer to special instructions / Safety data sheets.

09 Keep container in a well-ventilated place.

EU regulatory information

1999/13/EC (VOC): < 85 %

National regulatory information

Employment restrictions : Observe employment restrictions for young people. Observe

employment restrictions for child bearing mothers and nursing. Observe

employment restrictions for women of child-bearing age.

Water contaminating class (D): 1 - slightly water contaminating

16. Other information

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

11 Highly flammable.

20/22 Harmful by inhalation and if swallowed.

33 Danger of cumulative effects.

38 Irritating to skin.

Very toxic to aquatic organisms.Toxic to aquatic organisms.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

May cause long-term adverse effects in the aquatic environment.

61 May cause harm to the unborn child.

62 Possible risk of impaired fertility.

Harmful: may cause lung damage if swallowed.
Vapours may cause drowsiness and dizziness.

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.)

GB - EN Page 7 of 7

