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

1.1. Product identifier

TIP TOP SOLUTION HL-TNL4

Art.-No.

538 1135, 538 1143, 538 1157, 538 1162

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

Use of the substance/mixture

Adhesive

1.3. Details of the supplier of the safety data sheet

Company name:	REMA TIP TOP AG
Street:	Gruber Strasse 65
Place:	D-85586 Poing
Telephone:	+49 (0) 8121 / 707 - 100
Responsible Department:	Responsible for the safety data sheet: sds@gbk-ingelheim.de

1.4. Emergency telephone number:

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
Public Poisons Information Line: +353 (0) 1 809 2166 (8am-10pm 7 days a week)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Flam. Liq. 2; H225
Skin Irrit. 2; H315
STOT SE 3; H336
Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

Naphtha (petroleum)

Signal word: Danger

Pictograms:

Hazard statements

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe vapour.
P262	Do not get in eyes, on skin, or on clothing.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water

	or shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
P273	Avoid release to the environment.

Special labelling of certain mixtures

EUH208	Contains Colophonium, 1,3-Dihydroxybenzene, Methenamine, N-phenyl-1-naphthylamine, N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine. May produce an allergic reaction.

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
Vapours may form explosive mixture with air.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation solved in petroleum spirit

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
64742-49-0	Naphtha (petroleum) [Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, < 3% n-hexane]			< 60 %
	921-024-6		01-2119475514-35	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
64742-49-0	Naphtha (petroleum) [Hydrocarbons, C6, isoalkanes, < 3% n-hexane]			< 20 %
	931-254-9		01-2119484651-34	
	Flam. Liq. 2, Skin Irrit. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H315 H336 H304 H411			
1314-13-2	Zinc oxide			< 2,5 %
	215-222-5	030-013-00-7	01-2119463881-32	
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410			
8050-09-7	Colophonium			< 1 %
	232-475-7	650-015-00-7	01-2119480418-32	
	Skin Sens. 1; H317			
108-46-3	1,3-Dihydroxybenzene			< 1 %
	203-585-2	604-010-00-1	01-2119480136-40	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1B, STOT SE 1, STOT SE 2, Aquatic Acute 1, Aquatic Chronic 3; H302 H315 H318 H317 H370 H371 H400 H412			
100-97-0	Methenamine			< 1 %
	202-905-8	612-101-00-2	01-2119474895-20	
	Flam. Sol. 2, Skin Sens. 1; H228 H317			
793-24-8	N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine			< 0,3 %
	212-344-0		01-2119485839-15	
	Repr. 1B, Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H360FD H302 H317 H400 H410			
90-30-2	N-phenyl-1-naphthylamine			< 1 %
	201-983-0		01-2119488704-27	
	Acute Tox. 4, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H302 H317 H400 H410			

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. Limits, M-factors and ATE		
1314-13-2	215-222-5	Zinc oxide	< 2,5 %
	Aquatic Acute 1; H400: M=1 Aquatic Chronic 1; H410: M=1		
108-46-3	203-585-2	1,3-Dihydroxybenzene	< 1 %
	dermal: LD50 = 3360 mg/kg; oral: ATE 500 mg/kg Aquatic Acute 1; H400: M=1		
100-97-0	202-905-8	Methenamine	< 1 %
	dermal: LD50 = 2001 mg/kg; oral: LD50 = 9200 mg/kg		
793-24-8	212-344-0	N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine	< 0,3 %
	dermal: LD50 = > 7940 mg/kg; oral: LD50 = 893 mg/kg Aquatic Acute 1; H400: M=10 Aquatic Chronic 1; H410: M=10		
90-30-2	201-983-0	N-phenyl-1-naphthylamine	< 1 %
	dermal: LD50 = > 5000 mg/kg; oral: LD50 = 1625 mg/kg		

Further Information

According to note P to the directive 67/548/EEC, "Naphta (petroleum)" is not to be classified as "carcinogenic" ingredient because a benzene content (EINECS No. 200-753-7) is below 0.1 % by weight.

SECTION 4: First aid measures

4.1. Description of 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.
Seek medical treatment immediately.

After contact with skin

Wash off with soap and plenty of 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.
Summon a doctor immediately.

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.
The decision whether to induce vomiting or not is to be taken by a physician.

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

May cause drowsiness or dizziness.
Causes skin irritation.
Attention. Beware, danger of aspiration.

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

Foam, carbon dioxide (CO_2), 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 (CO), carbon dioxide (CO_2) and nitrogen oxides (NO_x).

5.3. Advice for firefighters

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.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Ensure adequate ventilation.

Remove persons to safety.

Keep away sources of ignition.

For non-emergency personnel

Do not breathe vapours.

Avoid contact with skin, eyes and clothing.

For emergency responders

In case of vapour formation use respirator.

Use personal protective clothing.

6.2. Environmental precautions

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

Do not discharge into the subsoil/soil.

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.

6.4. Reference to other sections

Observe protective instructions (see Sections 7 and 8).

Informations for disposal look up chapter 13.

SECTION 7: Handling and storage

7.1. Precautions for safe 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.
Pay attention to anti-explosion protection rules: In case of an explosive atmosphere use only explosion-proof equipment.

Advice on general occupational hygiene

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.

7.2. Conditions for safe storage, including any incompatibilities

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.

Hints on joint storage

Incompatible with oxidizing agents.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
1333-86-4	Carbon black (Inhalable Fraction)	-	3		TWA (8 h)	
9006-04-6	Natural Rubber Latex (as inhalable allergenic proteins)	-	0.0001		TWA (8 h)	
108-46-3	Resorcinol	10	45		TWA (8 h)	
1314-13-2	Zinc oxide, fume (Respirable Fraction)	-	2		TWA (8 h)	
		-	10		STEL (15 min)	

8.2. Exposure controls

Appropriate engineering controls

Pay attention to anti-explosion protection rules.
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly fitting goggles (EN 166).

Hand protection

Protective gloves resistant to chemicals made off 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.

Skin protection

Solvent-resistant apron (EN 467).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Black
Odour:	Hydrocarbon-like

		Test method
Changes in the physical state		
Melting point/freezing point:	< - 50 °C	
Boiling point or initial boiling point and boiling range:	60 - 95 °C	*)
Sublimation point:	n.a.	
Softening point:	n.d.	
Flash point:	- 25 °C	*)
Flammability		
Solid/liquid:	n.a.	
Explosive properties		
The product is considered non-explosive; nethertheless explosive vapour/air mixture can be generated.		
Lower explosion limits:	0,6 vol. %	*)
Upper explosion limits:	8,3 vol. %	*)
Auto-ignition temperature:	n.d.	
Self-ignition temperature		
Solid:	n.a.	
Gas:	n.a.	
Decomposition temperature:	n.d.	
pH-Value:	n.d.	
Viscosity / dynamic:	< 1200 mPa·s	
Viscosity / kinematic: (at 40 °C)	> 20,5 mm²/s	
Flow time:	n.d.	
Water solubility: (at 20 °C)	Immiscible	
Solubility in other solvents		
n.d.		
Partition coefficient n-octanol/water:	n.d.	
Vapour pressure: (at 20 °C)	100 - 200 hPa	*)
Density:	< 1 g/cm³	
Bulk density:	n.a.	
Relative vapour density:	n.d.	

9.2. Other information

Information with regard to physical hazard classes

Sustained combustibility: Sustained combustibility

Oxidizing properties

Not oxidising.

Other safety characteristics

Solvent separation test:	n.d.
Solvent content:	< 80 %
Evaporation rate:	n.d.

Further Information

*) Naphtha (petroleum)

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 oxidising agents.

10.4. 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.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

No hazardous decomposition products known.
Fire may produce:
Carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx)

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 toxical dates available.
Naphtha (petroleum)
LD50/oral/rat: > 2000 mg/kg
LD50/dermal/rabbit: > 2000 mg/kg
LC50/inhalation: > 20 mg/l/4h

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.
Contains Colophonium, 1,3-Dihydroxybenzene, Methenamine, N-phenyl-1-naphthylamine, N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness. (Naphtha (petroleum) [Hydrocarbons, C6-C7, n-alkanes, iso-alkanes, cyclic compounds, < 3% n-hexane])

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

Contact with eyes may cause irritation.
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.
May cause sensitization of susceptible persons by skin contact.

SECTION 12: Ecological information

12.1. Toxicity

Ecological dates are not available.
Naphtha (petroleum)
LC50/fish: 1 - 10 mg/l
EC50/Daphnia: 1 - 10 mg/l
EC50/Algae: 10 - 100 mg/l
NOEC/Fish: 1 - 10 mg/l
NOEC/Daphnia: 1 - 10 mg/l
Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

Naphtha (petroleum)
Liable to easy biological disintegration.

12.3. Bioaccumulative potential

Naphtha (petroleum)
A bioaccumulation potential is to be expected.

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 REACH, annex XIII.

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

Slightly water hazardous.

Further information

Do not flush into surface water or sanitary sewer system.

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

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 hazardous substances; 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.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640D
Limited quantity:	5 L / 30 kg
Excepted quantity:	E2
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	Adhesives
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Classification code:	F1
Special Provisions:	640D

Limited quantity:	5 L / 30 kg
Excepted quantity:	E2

Marine transport (IMDG)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES (Naphtha (petroleum))
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Marine pollutant:	Yes
Special Provisions:	-
Limited quantity:	5 L / 30 kg
Excepted quantity:	E2
EmS:	F-E, S-D

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	UN 1133
14.2. UN proper shipping name:	ADHESIVES
14.3. Transport hazard class(es):	3
14.4. Packing group:	II
Hazard label:	3

Special Provisions:	A3
Limited quantity Passenger:	1 L
Passenger LQ:	Y341
Excepted quantity:	E2
IATA-packing instructions - Passenger:	353
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	364
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: Yes

14.6. Special precautions for user

Handle in accordance with good industrial hygiene and safety practice.

14.7. Maritime transport in bulk according to IMO instruments

The transport takes place only in approved and appropriate packaging.

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 3, Entry 40, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes:	< 80 %
Information according to Directive 2012/18/EU (SEVESO III):	P5c FLAMMABLE LIQUIDS
Additional information:	E2

National regulatory information

Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). 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):	1 - slightly hazardous to water

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 7,9,12.

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

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data
Skin Irrit. 2; H315	Calculation method
STOT SE 3; H336	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H228	Flammable solid.

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H360FD	May damage fertility. May damage the unborn child.
H370	Causes damage to organs (CNS, Blood) if swallowed.
H371	May cause damage to organs (The respiratory system) if swallowed.
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.
H412	Harmful to aquatic life with long lasting effects.
EUH208	Contains Colophonium, 1,3-Dihydroxybenzene, Methenamine, N-phenyl-1-naphthylamine, N-(1,3-Dimethylbutyl)-N'-phenyl-p-phenylenediamine. May produce an allergic reaction.

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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)