

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 1 of 13

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

Manufacturer

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

Supplier

Company name: REMA TIP TOP INDUSTRY UK LTD
Street: Plumtree Industrial Estate, Harworth
Place: Doncaster, DN11 8EW, South Yorkshire
Telephone: +44 (0)1302 711233
Internet: www.rema-tiptop.co.uk

1.4. Emergency telephone number:

INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a)
In England and Wales: NHS 111 In Scotland: NHS 24 - dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Hazard categories:
Flammable liquid: Flam. Liq. 2
Skin corrosion/irritation: Skin Irrit. 2
Specific target organ toxicity - single exposure: STOT SE 3
Hazardous to the aquatic environment: Aquatic Chronic 2
Hazard Statements:
Highly flammable liquid and vapour.
Causes skin irritation.
May cause drowsiness or dizziness.
Toxic to aquatic life with long lasting effects.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Naphtha (petroleum)

Signal word: Danger

Pictograms:





Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 2 of 13

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

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 3 of 13

Hazardous components

| CAS No | Chemical name | | | Quantity |
|------------|--|--------------|------------------|----------|
| | EC No | Index No | REACH No | |
| | GHS Classification | | | |
| 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. 1, 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 | | | |
| 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 | | | |
| 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 | | | |

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 % |
| | | oral: LD50 = > 5000 mg/kg | |
| 108-46-3 | 203-585-2 | 1,3-Dihydroxybenzene | < 1 % |
| | | dermal: LD50 = 3360 mg/kg; oral: LD50 = 301 mg/kg | |
| 100-97-0 | 202-905-8 | Methenamine | < 1 % |
| | | dermal: LD50 = 2001 mg/kg; oral: LD50 = 9200 mg/kg | |
| 90-30-2 | 201-983-0 | N-phenyl-1-naphthylamine | < 1 % |
| | | dermal: LD50 = > 5000 mg/kg; oral: LD50 = 1625 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 M acute; H400: M=10 M chron.; H410: M=10 | |



Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 4 of 13

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.

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 (CO₂), 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 (CO₂) 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.



Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 5 of 13

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/ground water.
- 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).
- Information for disposal see section 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.
- Use only explosion-proof equipment.

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

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 6 of 13

8.1. Control parameters

Exposure limits (EH40)

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|-----------|------------------------------|-----|-------------------|-----------|---------------|--------|
| 1333-86-4 | Carbon black | - | 3.5 | | TWA (8 h) | WEL |
| | | - | 7 | | STEL (15 min) | WEL |
| 108-46-3 | Resorcinol | 10 | 46 | | TWA (8 h) | WEL |
| | | 20 | 92 | | STEL (15 min) | WEL |
| 8050-09-7 | Rosin-based solder flux fume | - | 0.05 | | TWA (8 h) | WEL |
| | | - | 0.15 | | STEL (15 min) | WEL |

8.2. Exposure controls

Appropriate engineering 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.

Eye/face protection

Tightly fitting goggles (EN 166).

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.

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

pH-Value: n.d.

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.

Test method

**Safety Data Sheet**

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 7 of 13

Flash point: - 25 °C *)

Flammability

Solid/liquid: n.a.

Gas: n.a.

Explosive properties

The product is considered non-explosive; nevertheless 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.

Oxidizing properties

Not oxidising.

Vapour pressure:
(at 20 °C) 100 - 200 hPa *)Density: < 1 g/cm³

Bulk density: n.a.

Water solubility:
(at 20 °C) Immiscible**Solubility in other solvents**

n.d.

Partition coefficient n-octanol/water: n.d.

Viscosity / dynamic: < 1200 mPa·s

Viscosity / kinematic:
(at 40 °C) > 20,5 mm²/s

Flow time: n.d.

Relative vapour density: n.d.

Evaporation rate: n.d.

Solvent separation test: n.d.

Solvent content: < 80 %

9.2. Other 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 oxidizing agents.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

Heating can release vapours which can be ignited.

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 8 of 13

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 (NO_x)

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

No toxicological data available.

Naphtha (petroleum)

LD50/oral/rat: > 2000 mg/kg

LD50/dermal/rabbit: > 2000 mg/kg

LC50/inhalation: > 20 mg/l/4h

Irritation and corrosivity

Causes skin irritation.

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

Sensitising effects

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

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 may 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

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 9 of 13

Ecological data 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)

Readily biodegradable.

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

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Low hazard to waters.

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)

| | |
|---|-----------|
| <u>14.1. UN number:</u> | UN 1133 |
| <u>14.2. UN proper shipping name:</u> | ADHESIVES |
| <u>14.3. Transport hazard class(es):</u> | 3 |
| <u>14.4. Packing group:</u> | II |

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 10 of 13

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: 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: 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: 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

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 11 of 13

| | | |
|--|------|------|
| 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 28, Entry 40

2004/42/EC (VOC): < 80 %

Information according to 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): 2,4,6,7,11,12,14,15.

Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 12 of 13

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 GB CLP Regulation

| 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



Safety Data Sheet

according to UK REACH Regulation

TIP TOP SOLUTION HL-TNL4

Revision date: 23.12.2021

Product code: 00156-0444

Page 13 of 13

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.)