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

1.1 Product identifier
Trade name: Rittal Lackstift

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet
Manufacturer/Supplier:
RITTAL GmbH & Co.KG
Auf dem Stützelberg
D-35745 Herborn
Phone: +49 2772 505 0
e-mail: info@rittal.de

1.4 Emergency telephone number:
Informationszentrale gegen Vergiftungen Bonn
Tel.: 0228/19240 (emergency)
0228/287-3-3480 (office)
Fax: 0228/287-3-3278

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008

GHS02 flame
Flam. Liq. 3 H226 Flammable liquid and vapour.

GHS08 health hazard
STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

GHS09 environment
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

GHS07
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation.
Skin Sens. 1 H317 May cause an allergic skin reaction.
STOT SE 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

(Contd. on page 2)
2.2 Label elements

- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.

- **Hazard pictograms** GHS02, GHS07, GHS08, GHS09

- **Signal word** Warning

- **Hazard-determining components of labelling:**
  Hydrocarbons, C9, aromatics
  xylene
  Reaction mass of pentamethyl-piperidyl sebacate

- **Hazard statements**
  H226 Flammable liquid and vapour.
  H315 Causes skin irritation.
  H319 Causes serious eye irritation.
  H317 May cause an allergic skin reaction.
  H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
  H373 May cause damage to organs through prolonged or repeated exposure.
  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 dust/fume/gas/mist/vapours/spray.
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P303+P352 IF ON SKIN: Wash with plenty of water.
  P321 Specific treatment (see on this label).

- **Labelling of packages where the contents do not exceed 125 ml**

- **Hazard pictograms** GHS02, GHS07, GHS08, GHS09

- **Signal word** Warning

- **Hazard-determining components of labelling:**
  Hydrocarbons, C9, aromatics
  xylene
  Reaction mass of pentamethyl-piperidyl sebacate

- **Hazard statements**
  H317 May cause an allergic skin reaction.

- **Precautionary statements**
  P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  P272 Contaminated work clothing should not be allowed out of the workplace.
  P280 Wear protective gloves.
  P302+P352 IF ON SKIN: Wash with plenty of water.
  P321 Specific treatment (see on this label).
  P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

2.3 Other hazards

- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.
SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

<table>
<thead>
<tr>
<th>Dangerous components:</th>
<th>Hydrocarbons, C9, aromatics</th>
<th>EC number: 918-668-5</th>
<th>CAS: 1330-20-7</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>Reg.nr.: 01-2119455851-35</td>
<td>EINECS: 215-535-7</td>
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<tr>
<td></td>
<td>xylene</td>
<td>25-50%</td>
<td>≥10-≤20%</td>
</tr>
<tr>
<td></td>
<td>CAS: 108-65-6</td>
<td>EINECS: 203-603-9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-methoxy-1-methylethyl acetate</td>
<td>Reg.nr.: 01-2119475791-29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ethylbenzene</td>
<td>25-&lt;10%</td>
<td></td>
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<tr>
<td></td>
<td>CAS: 112-07-2</td>
<td>EINECS: 203-933-3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2-butoxyethyl acetate</td>
<td>≥0.1-≤2.5%</td>
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</tr>
<tr>
<td></td>
<td>EC number: 915-687-0</td>
<td>EINECS: 203-625-9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reaction mass of pentamethyl-piperidyl sebacate</td>
<td>Reg.nr.: 01-2119471310-51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>toluene</td>
<td>≥0.1-≤1%</td>
<td></td>
</tr>
</tbody>
</table>

- Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information:
  Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  In case of unconsciousness place patient stably in side position for transportation.
- After skin contact:
  Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
  Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing:
  If symptoms persist consult doctor.
- 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.
SECTION 5: Firefighting measures

- 5.1 Extinguishing media
  - Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
  - For safety reasons unsuitable extinguishing agents: Water with full jet

- 5.2 Special hazards arising from the substance or mixture
  No further relevant information available.

- 5.3 Advice for firefighters
  - Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
  Wear protective equipment. Keep unprotected persons away.

- 6.2 Environmental precautions:
  Inform respective authorities in case of seepage into water course or sewage system.
  Do not allow to enter sewers/ surface or ground water.

- 6.3 Methods and material for containment and cleaning up:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
  Dispose contaminated material as waste according to item 13.
  Ensure adequate ventilation.
  Do not flush with water or aqueous cleansing agents

- 6.4 Reference to other sections
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protection equipment.
  See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.

- Information about fire - and explosion protection:
  Keep ignition sources away - Do not smoke.
  Protect from heat.
  Protect against electrostatic charges.

- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: No special requirements.
    - Information about storage in one common storage facility: Store away from foodstuffs.
  - Further information about storage conditions:
    Keep container tightly sealed.
    Protect from heat and direct sunlight.

- 7.3 Specific end use(s)
  No further relevant information available.
SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**
  - **Ingredients with limit values that require monitoring at the workplace:**
    - **1330-20-7 xylene**
      - WEL Short-term value: 441 mg/m³, 100 ppm
      - Long-term value: 220 mg/m³, 50 ppm
      - Sk; BMGV
    - **100-41-4 ethylbenzene**
      - WEL Short-term value: 552 mg/m³, 125 ppm
      - Long-term value: 441 mg/m³, 100 ppm
      - Sk
    - **108-65-6 2-methoxy-1-methylethyl acetate**
      - WEL Short-term value: 548 mg/m³, 100 ppm
      - Long-term value: 274 mg/m³, 50 ppm
      - Sk
    - **112-07-2 2-butoxyethyl acetate**
      - WEL Short-term value: 332 mg/m³, 50 ppm
      - Long-term value: 133 mg/m³, 20 ppm
      - Sk
    - **108-88-3 toluene**
      - WEL Short-term value: 384 mg/m³, 100 ppm
      - Long-term value: 191 mg/m³, 50 ppm
      - Sk
  - **Ingredients with biological limit values:**
    - **1330-20-7 xylene**
      - BMGV 650 mmol/mol creatinine
      - Medium: urine
      - Sampling time: post shift
      - Parameter: methyl hippuric acid

- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**
  - **Personal protective equipment:**
    - **General protective and hygienic measures:**
      - Keep away from foodstuffs, beverages and feed.
      - Immediately remove all soiled and contaminated clothing
      - Wash hands before breaks and at the end of work.
      - Avoid contact with the eyes and skin.
    - **Respiratory protection:**
      - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
**Protection of hands:**

Protective gloves (EN 374)

The glove material has to be impermeable and resistant to the product/substance/preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

**Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Breakthrough time of glove material**

The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles

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**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
  - General Information
    - **Appearance:**
      - Form: Fluid
      - Colour: According to product specification
      - Odour: Characteristic
      - Odour threshold: Not determined.
    - **pH-value:** Not determined.
  - **Change in condition**
    - Melting point/freezing point: Undetermined.
    - Initial boiling point and boiling range: 124°C
  - **Flash point:** 24°C (DIN EN ISO 1523:2002)
  - **Flammability (solid, gas):** Not applicable.
  - **Ignition temperature:** 450°C (DIN 51794)
  - **Decomposition temperature:** Not determined.
  - **Auto-ignition temperature:** Product is not selfigniting.
  - **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
  - **Explosion limits:**
    - Lower: 0.7 Vol %
Upper: 7.5 Vol %

- Vapour pressure at 20°C: 6.7-8.2 hPa
- Density at 20°C: 1.037 g/cm³ (DIN EN ISO 2811-1)
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.

- Solubility in / Miscibility with water: Not miscible or difficult to mix.
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity: Dynamic: Not determined.
  Kinematic at 20°C: 160-180 s (DIN 53211/4)
- Solvent content: VOC (EC) 54.78 %
- Solids content (weight-%): 45.2 %
- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity: No further relevant information available.
- 10.2 Chemical stability:
  Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- 10.3 Possibility of hazardous reactions: No dangerous reactions known.
- 10.4 Conditions to avoid: No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: Carbon monoxide

SECTION 11: Toxicological information

- 11.1 Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.

- LD/LC50 values relevant for classification:

  Hydrocarbons, C9, aromatics
  Oral  LD50  >2,000 mg/kg (rat)
  Dermal LD50  >2,000 mg/kg (rabbit)

  1330-20-7 xylene
  Oral  LD50  5,251 mg/kg (rat)
  Dermal LD50  >5,000 mg/kg (rabbit)
  Inhalative LC50/4 h 29 mg/l (rat)

- Primary irritant effect: 
- Skin corrosion/irritation Causes skin irritation.
Trade name: Rittal Lackstift

- Serious eye damage/irritation
  Causes serious eye irritation.
- Respiratory or skin sensitisation
  May cause an allergic skin reaction.
- CMR effects (carcinogenicity, mutagenicity and toxicity 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 respiratory irritation. May cause drowsiness or dizziness.
- STOT-repeated exposure
  May cause damage to organs through prolonged or repeated exposure.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- 12.1 Toxicity
  Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- Ecotoxic effects:
  Remark: Toxic for fish
- Additional ecological information:
  General notes:
  Water hazard class 2 (German Regulation): hazardous for water
  Do not allow product to reach ground water, water course or sewage system.
  Danger to drinking water if even small quantities leak into the ground.
  Also poisonous for fish and plankton in water bodies.
  Toxic for aquatic organisms
- 12.5 Results of PBT and vPvB assessment
  PBT: Not applicable.
  vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  Recommendation
  Must not be disposed together with household garbage. Do not allow product to reach sewage system.

<table>
<thead>
<tr>
<th>European waste catalogue</th>
</tr>
</thead>
<tbody>
<tr>
<td>08 01 11* waste paint and varnish containing organic solvents or other hazardous substances</td>
</tr>
</tbody>
</table>

- Uncleaned packaging:
  Recommendation:
  Packagings that may not be cleansed are to be disposed of in the same manner as the product.
SECTION 14: Transport information

- **14.1 UN-Number**
  - ADR, IMDG, IATA  
  - UN1263

- **14.2 UN proper shipping name**
  - ADR  
  - UN1263 PAINT, ENVIRONMENTALLY HAZARDOUS
  - IMDG  
  - PAINT (Solvent naphtha, bis-(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate), MARINE POLLUTANT
  - IATA

- **14.3 Transport hazard class(es)**
  - ADR
  - ![Flammable Liquid](image)
  - Class 3 (F1) Flammable liquids.
  - Label 3

- **IMDG**
  - ![Flammable Liquid](image)
  - Class 3 Flammable liquids.
  - Label 3

- **IATA**
  - ![Flammable Liquid](image)
  - Class 3 Flammable liquids.
  - Label 3

- **14.4 Packing group**
  - ADR, IMDG, IATA  
  - III

- **14.5 Environmental hazards:**
  - Product contains environmentally hazardous substances: bis-(1,2,2,6,6-pentamethyl-4-piperidyl)sebacate, Solvent naphtha
  - Marine pollutant: Symbol (fish and tree)
  - Special marking (ADR): Symbol (fish and tree)

- **14.6 Special precautions for user**
  - Warning: Flammable liquids.
  - Danger code (Kemler): 30
  - EMS Number: F-E,S-E
  - Stowage Category A

- **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
  - Not applicable.
Safety data sheet
according to 1907/2006/EC, Article 31

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- Transport/Additional information:
  - ADR
  - Transport category: 3
  - Tunnel restriction code: D/E
  - Remarks: ≤ 5 l: 2.2.3.1.5 ADR

- IMDG
  - Limited quantities (LQ): 5L
  - Remarks: ≤ 5 l: 2.2.3.1.5 IMDG

- UN "Model Regulation":
  - UN 1263 PAINT, 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I None of the ingredients is listed.
  - Seveso category
  - E2 Hazardous to the Aquatic Environment
  - P5c FLAMMABLE LIQUIDS
  - Qualifying quantity (tonnes) for the application of lower-tier requirements: 200 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements: 500 t
  - REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 48

- National regulations:

<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>NK</td>
<td>50-100</td>
</tr>
</tbody>
</table>

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  - H225 Highly flammable liquid and vapour.
  - H226 Flammable liquid and vapour.
  - H302 Harmful if swallowed.
  - H304 May be fatal if swallowed and enters airways.
  - H312 Harmful in contact with skin.
  - H315 Causes skin irritation.
  - H317 May cause an allergic skin reaction.
  - H319 Causes serious eye irritation.
  - H332 Harmful if inhaled.
  - H335 May cause respiratory irritation.
  - H366 May cause drowsiness or dizziness.
  - H361d Suspected of damaging the unborn child.
  - H373 May cause damage to organs through prolonged or repeated exposure.

(Contd. on page 11)
Trade name: Rittal Lackstift

45.2.4

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.

Classification according to Regulation (EC) No 1272/2008
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1A: Skin sensitisation – Category 1A
Repr. 2: Reproductive toxicity – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

Data compared to the previous version altered.