



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

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SDS No. : 390436
V002.6

Pattex Kraftkleber Classic

Revision: 11.11.2016
printing date: 15.12.2016
Replaces version from: 31.05.2016

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

1.1. Product identifier

Pattex Kraftkleber Classic

Contains:

Ethyl acetate
Methylcyclohexane
Hydrocarbon aliphatic C4-11 < 0,1% benzene

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

Intended use:
Contact adhesive

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA
Henkelstr. 67
40589 Düsseldorf

Germany

Phone: +49 (211) 797 0
Fax-no.: +49 (211) 798 4008

ua-productsafety.de@henkel.com

1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

Further information is available at Poison Control Centers.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

| | |
|-------------------------------------------------------|------------|
| Flammable liquids | Category 2 |
| H225 Highly flammable liquid and vapor. | |
| Skin irritation | Category 2 |
| H315 Causes skin irritation. | |
| Serious eye irritation | Category 2 |
| H319 Causes serious eye irritation. | |
| Specific target organ toxicity - single exposure | Category 3 |
| H336 May cause drowsiness or dizziness. | |
| Target organ: Central Nervous System | |
| Chronic hazards to the aquatic environment | Category 2 |
| H411 Toxic to aquatic life with long lasting effects. | |

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Signal word:

Danger

Hazard statement:

H225 Highly flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Supplemental information

Contains Rosin. May produce an allergic reaction.

Precautionary statement:

P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.

Precautionary statement: Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing vapours.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves/eye protection.

Precautionary statement: Storage

P403 Store in a well-ventilated place.

2.3. Other hazards

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.

Pregnant women should absolutely avoid inhalation and skin contact.

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General chemical description:

Adhesive

Base substances of preparation:

aliphatic hydrocarbons

Declaration of the ingredients according to CLP (EC) No 1272/2008:

| Hazardous components CAS-No. | EC Number REACH-Reg No. | content | Classification |
|-------------------------------------------------------------|------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | 205-500-4 01-2119475103-46 | >= 25- <= 50 % | Flam. Liq. 2 H225 STOT SE 3 H336 Eye Irrit. 2 H319 |
| Methylcyclohexane 108-87-2 | 203-624-3 01-2119486992-20 | >= 20- <= 40 % | Flam. Liq. 2 H225 Asp. Tox. 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 2 H411 |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | 265-151-9 01-2119484651-34 | >= 10- <= 20 % | Asp. Tox. 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Flam. Liq. 2 H225 Aquatic Chronic 2 H411 |
| Rosin 8050-09-7 | 232-475-7 01-2119480418-32 | >= 0,1- < 1 % | Skin Sens. 1 H317 |
| zinc oxide 1314-13-2 | 215-222-5 01-2119463881-32 | >= 0,1- < 1 % | Aquatic Acute 1 H400 Aquatic Chronic 1 H410 |
| n-Hexane 110-54-3 | 203-777-6 01-2119480412-44 | >= 0,1- < 0,5 % | Flam. Liq. 2 H225 Repr. 2 H361f Asp. Tox. 1 H304 STOT RE 2 H373 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Chronic 2 H411 |

For full text of the H - statements and other abbreviations see section 16 "Other information".
Substances without classification may have community workplace exposure limits available.

SECTION 4: First aid measures**4.1. Description of first aid measures**

General information:

In case of adverse health effects seek medical advice.

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Skin care. Remove contaminated clothes immediately.

Eye contact:

Immediately flush eyes with soft jet of water or eye rinse solution for at least 5 minutes. If pains remain (intensive smarting, sensitivity to light, visual disturbance) continue flushing and contact/seek doctor or hospital.

Ingestion:

Rinse mouth, do not induce vomiting, consult a doctor.

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

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

Vapors may cause drowsiness and dizziness.

4.3. Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

carbon dioxide, foam, powder, water spray jet, fine water spray

Extinguishing media which must not be used for safety reasons:

High pressure waterjet

5.2. Special hazards arising from the substance or mixture

In the event of a fire, carbon monoxide (CO) and carbon dioxide (CO₂) can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

Additional information:

Cool endangered containers with water spray jet.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

Danger of slipping on spilled product.

Avoid contact with skin and eyes.

Wear protective equipment.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ventilate working rooms thoroughly. Avoid naked flames, sparking and sources of ignition. Switch off electrical devices. Do not smoke, do not weld. Do not empty waste into waste water drains.

During processing and drying after adhesion, ventilate well. Avoid all sources of fire such as stoves and ovens. Switch off all electrical devices such as parabolic heaters, hot plates, storage heaters etc. in good time for them to have cooled down before commencing work. Avoid all sparks, including those occurring at electrical switches and devices.

Avoid skin and eye contact.

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original container.

Close the container carefully after use and store it at a good ventilated place.

Avoid strictly temperatures below + 5 °C and above + 50 °C.

Do not store together with food or other consumables (coffee, tea, tobacco, etc.).

7.3. Specific end use(s)

Contact adhesive

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational Exposure Limits**

Valid for
Germany

| Ingredient [Regulated substance] | ppm | mg/m ³ | Value type | Short term exposure limit category / Remarks | Regulatory list |
|------------------------------------|-----|-------------------|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Ethyl acetate 141-78-6 | 400 | 1.500 | Exposure limit(s): | 2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7). | TRGS 900 |
| Ethyl acetate 141-78-6 | | | Short Term Exposure Classification: | Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages. | TRGS 900 |
| Methylcyclohexane 108-87-2 | | | Short Term Exposure Classification: | Category II: substances with a resorptive effect. | TRGS 900 |
| Methylcyclohexane 108-87-2 | 200 | 810 | Exposure limit(s): | 2 | TRGS 900 |
| n-Hexane 110-54-3 [N-HEXANE] | 20 | 72 | Time Weighted Average (TWA): | Indicative | ECTLV |
| n-Hexane 110-54-3 | 50 | 180 | Exposure limit(s): | 8 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7). | TRGS 900 |
| n-Hexane 110-54-3 | | | Short Term Exposure Classification: | Category II: substances with a resorptive effect. | TRGS 900 |

Predicted No-Effect Concentration (PNEC):

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks |
|---------------------------|------------------------------------|--------------------|-------|-----|----------------|-------------------|---------|
| | | | mg/l | ppm | mg/kg | others | |
| Ethyl acetate 141-78-6 | aqua (freshwater) | | | | | 0,26 mg/L | |
| Ethyl acetate 141-78-6 | aqua (marine water) | | | | | 0,026 mg/L | |
| Ethyl acetate 141-78-6 | aqua (intermittent releases) | | | | | 1,65 mg/L | |
| Ethyl acetate 141-78-6 | sewage treatment plant (STP) | | | | | 650 mg/L | |
| Ethyl acetate 141-78-6 | sediment (freshwater) | | | | 1,25 mg/kg | | |
| Ethyl acetate 141-78-6 | sediment (marine water) | | | | 0,125 mg/kg | | |
| Ethyl acetate 141-78-6 | oral | | | | | 200 mg/kg food | |
| Ethyl acetate 141-78-6 | soil | | | | 0,24 mg/kg | | |
| Rosin 8050-09-7 | aqua (freshwater) | | | | | 0,005 mg/L | |
| Rosin 8050-09-7 | aqua (marine water) | | | | | 0,0005 mg/L | |
| Rosin 8050-09-7 | sediment (freshwater) | | | | 108 mg/kg | | |
| Rosin 8050-09-7 | sediment (marine water) | | | | 10,8 mg/kg | | |
| Rosin 8050-09-7 | soil | | | | 21,4 mg/kg | | |
| Rosin 8050-09-7 | sewage treatment plant (STP) | | | | | 1000 mg/L | |
| zinc oxide 1314-13-2 | aqua (freshwater) | | | | | 20,6 µg/L | |
| zinc oxide 1314-13-2 | aqua (marine water) | | | | | 6,1 µg/L | |
| zinc oxide 1314-13-2 | sewage treatment plant (STP) | | | | | 100 µg/L | |
| zinc oxide 1314-13-2 | sediment (freshwater) | | | | 117,8 mg/kg | | |
| zinc oxide 1314-13-2 | sediment (marine water) | | | | 56,5 mg/kg | | |
| zinc oxide 1314-13-2 | soil | | | | 35,6 mg/kg | | |

Derived No-Effect Level (DNEL):

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|----------------------------------------------------------|--------------------|-------------------|----------------------------------------------|---------------|--------------------------|---------|
| Ethyl acetate 141-78-6 | Workers | inhalation | Acute/short term exposure - systemic effects | | 1468 mg/m ³ | |
| Ethyl acetate 141-78-6 | Workers | inhalation | Acute/short term exposure - local effects | | 1468 mg/m ³ | |
| Ethyl acetate 141-78-6 | Workers | dermal | Long term exposure - systemic effects | | 63 mg/kg | |
| Ethyl acetate 141-78-6 | Workers | inhalation | Long term exposure - systemic effects | | 734 mg/m ³ | |
| Ethyl acetate 141-78-6 | Workers | inhalation | Long term exposure - local effects | | 734 mg/m ³ | |
| Ethyl acetate 141-78-6 | General population | Inhalation | Acute/short term exposure - systemic effects | | 734 mg/m ³ | |
| Ethyl acetate 141-78-6 | General population | inhalation | Acute/short term exposure - local effects | | 734 mg/m ³ | |
| Ethyl acetate 141-78-6 | General population | dermal | Long term exposure - systemic effects | | 37 mg/kg | |
| Ethyl acetate 141-78-6 | General population | inhalation | Long term exposure - systemic effects | | 367 mg/m ³ | |
| Ethyl acetate 141-78-6 | General population | oral | Long term exposure - systemic effects | | 4,5 mg/kg | |
| Ethyl acetate 141-78-6 | General population | inhalation | Long term exposure - local effects | | 367 mg/m ³ | |
| Methylcyclohexane 108-87-2 | Workers | dermal | Long term exposure - systemic effects | | 773 mg/kg bw/day | |
| Methylcyclohexane 108-87-2 | Workers | Inhalation | Long term exposure - systemic effects | | 2035 mg/m ³ | |
| Methylcyclohexane 108-87-2 | General population | dermal | Long term exposure - systemic effects | | 699 mg/kg bw/day | |
| Methylcyclohexane 108-87-2 | General population | Inhalation | Long term exposure - systemic effects | | 608 mg/m ³ | |
| Methylcyclohexane 108-87-2 | General population | oral | Long term exposure - systemic effects | | 699 mg/kg bw/day | |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | General population | dermal | Long term exposure - systemic effects | | 1377 mg/kg bw/day | |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | Workers | Inhalation | Long term exposure - systemic effects | | 5306 mg/m ³ | |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | General population | Inhalation | Long term exposure - systemic effects | | 1137 mg/m ³ | |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | General population | oral | Long term exposure - systemic effects | | 1301 mg/kg bw/day | |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | Workers | dermal | Long term exposure - systemic effects | | 13964 mg/kg bw/day | |
| Rosin 8050-09-7 | Workers | Inhalation | Long term exposure - systemic effects | | 176,32 mg/m ³ | |
| Rosin 8050-09-7 | Workers | dermal | Long term exposure - systemic effects | | 25 mg/kg bw/day | |
| Rosin 8050-09-7 | General population | Inhalation | Long term exposure - | | 52,174 mg/m ³ | |

| | | | | | | |
|-------------------------|-----------------------|------------|---------------------------------------------|--|-------------------|--|
| | | | systemic effects | | | |
| Rosin 8050-09-7 | General population | dermal | Long term exposure - systemic effects | | 15 mg/kg bw/day | |
| Rosin 8050-09-7 | General population | oral | Long term exposure - systemic effects | | 15 mg/kg bw/day | |
| zinc oxide 1314-13-2 | Workers | Inhalation | Long term exposure - systemic effects | | 5 mg/m3 | |
| zinc oxide 1314-13-2 | Workers | dermal | Long term exposure - systemic effects | | 83 mg/kg bw/day | |
| zinc oxide 1314-13-2 | Workers | inhalation | Long term exposure - local effects | | 0,5 mg/m3 | |
| zinc oxide 1314-13-2 | General population | Inhalation | Long term exposure - systemic effects | | 2,5 mg/m3 | |
| zinc oxide 1314-13-2 | General population | dermal | Long term exposure - systemic effects | | 83 mg/kg bw/day | |
| zinc oxide 1314-13-2 | General population | oral | Long term exposure - systemic effects | | 0,83 mg/kg bw/day | |
| n-Hexane 110-54-3 | General population | inhalation | Long term exposure - systemic effects | | 16 mg/m3 | |
| n-Hexane 110-54-3 | Workers | dermal | Long term exposure - systemic effects | | 11 mg/kg bw/day | |
| n-Hexane 110-54-3 | General population | dermal | Long term exposure - systemic effects | | 5,3 mg/kg bw/day | |
| n-Hexane 110-54-3 | Workers | inhalation | Long term exposure - systemic effects | | 75 mg/m3 | |
| n-Hexane 110-54-3 | General population | oral | Long term exposure - systemic effects | | 4 mg/kg bw/day | |

Biological Exposure Indices:

| Ingredient [Regulated substance] | Parameters | Biological specimen | Sampling time | Conc. | Basis of biol. exposure index | Remark | Additional Information |
|----------------------------------|------------------------------------------------------------------|---------------------|------------------------------|--------|-------------------------------|--------|------------------------|
| n-Hexane 110-54-3 | Hexane-2,5-dione plus 4,5-Dihydroxy-2-hexanone | Urine | Sampling time: End of shift. | 5 mg/l | DE BAT | | |
| n-Hexane 110-54-3 | Hexane-2,5-dione plus 4,5-Dihydroxy-2-hexanone (with hydrolysis) | Urine | Sampling time: End of shift. | 5 mg/l | DE BGW | | |

| Ingredient [Regulated substance] | Parameters | Biological specimen | Sampling time | Conc. | Basis of biol. exposure index | Remark | Additional Information |
|----------------------------------|------------------------------------------------------------------|---------------------|------------------------------|--------|-------------------------------|--------|------------------------|
| n-Hexane 110-54-3 | Hexane-2,5-dione plus 4,5-Dihydroxy-2-hexanone | Urine | Sampling time: End of shift. | 5 mg/l | DE BAT | | |
| n-Hexane 110-54-3 | Hexane-2,5-dione plus 4,5-Dihydroxy-2-hexanone (with hydrolysis) | Urine | Sampling time: End of shift. | 5 mg/l | DE BGW | | |

8.2. Exposure controls:**Respiratory protection:**

Suitable breathing mask when there is inadequate ventilation.

Combination filter: ABEKP (EN 14387)

This recommendation should be matched to local conditions.

Hand protection:

Recommended are gloves made from Nitril rubber (Material thickness >0,1 mm, Perforation time < 30s). Gloves should be replaced after each short time contact or contamination. Available at laboratory specialized trade or at pharmacies / chemist's shops.

In the case of longer contact protective gloves made from nitrile rubber are recommended according to EN 374.

Perforation time > 10 minutes

material thickness > 0.4 mm

In the case of longer and repeated contact please note that in practice the penetration times may be considerably shorter than those determined according to EN 374. The protective gloves must always be checked for their suitability for use at the specific workplace (e.g. mechanical and thermal stress, product compatibility, antistatic effects, etc.). The gloves must be replaced immediately at the first signs of wear and tear. The information provided by the manufacturers and given in the relevant trade association regulations for industrial safety must always be observed. We recommend that a hand care plan is drawn up in cooperation with a glove manufacturer and the trade association in accordance with the local operating conditions.

Eye protection:

Goggles which can be tightly sealed.

Protective eye equipment should conform to EN166.

Skin protection:

Suitable protective clothing

Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:

The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.

Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

| | |
|--------------------------------------------------------------------------|----------------------------------------------------|
| Appearance | liquid highly viscous beige |
| Odor | Solvent |
| Odour threshold | No data available / Not applicable |
| pH | No data available / Not applicable |
| Initial boiling point | > 55 °C (> 131 °F) |
| Flash point | -21 °C (-5.8 °F); DIN 51755 Closed cup flash point |
| Decomposition temperature | No data available / Not applicable |
| Vapour pressure (25 °C (77 °F)) | 161 mbar |
| Density (20 °C (68 °F)) | 0,84 - 0,88 g/ml |
| Bulk density | No data available / Not applicable |
| Viscosity (Brookfield; speed of rotation: 50 min-1; Spindle No: 4) | 1.900 - 2.300 mPa.s |
| Viscosity (kinematic) (;) | > 1.000 mm ² /s |
| Explosive properties | No data available / Not applicable |
| Solubility (qualitative) | No data available / Not applicable |
| Solidification temperature | No data available / Not applicable |
| Melting point | No data available / Not applicable |
| Flammability | No data available / Not applicable |
| Auto-ignition temperature | No data available / Not applicable |
| Explosive limits | |
| lower | 1,4 %(V) |
| upper | 8,60 %(V) |
| Partition coefficient: n-octanol/water | No data available / Not applicable |
| Evaporation rate | No data available / Not applicable |
| Vapor density | No data available / Not applicable |
| Oxidising properties | No data available / Not applicable |

9.2. Other information

No data available / Not applicable

SECTION 10: Stability and reactivity**10.1. Reactivity**

None if used for intended purpose.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

None if used for intended purpose.

10.5. Incompatible materials

None if used properly.

10.6. Hazardous decomposition products

None known.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****General toxicological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

STOT-single exposure:

May cause drowsiness or dizziness.

Inhalative toxicity:

The toxicity of the product is due to its narcotic effect after inhalation.

In the event of protracted or repeated exposure, damage to health cannot be excluded.

Skin irritation:

Causes skin irritation.

Eye irritation:

Causes serious eye irritation.

Sensitizing:

An allergic reaction cannot be excluded after repeated skin contact.

Acute oral toxicity:

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|-------------------------------------------------------------|---------------|---------------|-------------------------|------------------|---------|------------------------------------------|
| Ethyl acetate 141-78-6 | LD50 | 6.100 mg/kg | oral | | rat | not specified |
| Methylcyclohexane 108-87-2 | LD50 | > 5.840 mg/kg | oral | | rat | not specified |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | LD50 | > 5.000 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| Rosin 8050-09-7 | LD50 | 2.800 mg/kg | oral | | rat | not specified |
| zinc oxide 1314-13-2 | LD50 | > 5.000 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |
| n-Hexane 110-54-3 | LD50 | 16.000 mg/kg | oral | | rat | OECD Guideline 401 (Acute Oral Toxicity) |

Acute inhalative toxicity:

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|-------------------------------------------------------------|---------------|------------|-------------------------|------------------|---------|------------------------------------------------|
| Ethyl acetate 141-78-6 | LC50 | 200 mg/l | | 1 h | rat | not specified |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | LC50 | > 20 mg/l | vapour | 4 h | rat | OECD Guideline 403 (Acute Inhalation Toxicity) |
| zinc oxide 1314-13-2 | LC50 | > 5,7 mg/l | aerosol | 4 h | rat | OECD Guideline 403 (Acute Inhalation Toxicity) |
| n-Hexane 110-54-3 | LC50 | | vapour | 24 h | rat | OECD Guideline 403 (Acute Inhalation Toxicity) |

Acute dermal toxicity:

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---------------------------------|---------------|----------------|-------------------------|------------------|---------|--------------------------------------------|
| Ethyl acetate 141-78-6 | LD50 | > 20.000 mg/kg | dermal | | rabbit | Draize Test |
| Rosin 8050-09-7 | LD50 | > 2.000 mg/kg | dermal | | rat | OECD Guideline 402 (Acute Dermal Toxicity) |
| zinc oxide 1314-13-2 | LD50 | > 2.000 mg/kg | dermal | | rat | OECD Guideline 402 (Acute Dermal Toxicity) |
| n-Hexane 110-54-3 | LD50 | > 2.000 mg/kg | dermal | | rabbit | not specified |

Skin corrosion/irritation:

| Hazardous components CAS-No. | Result | Exposure time | Species | Method |
|---------------------------------|---------------------|------------------|---------|-------------------------------------------------------------|
| Ethyl acetate 141-78-6 | slightly irritating | 24 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| Rosin 8050-09-7 | not irritating | 4 h | rabbit | OECD Guideline 404 (Acute Dermal Irritation / Corrosion) |
| zinc oxide 1314-13-2 | not irritating | | rabbit | not specified |

Serious eye damage/irritation:

| Hazardous components CAS-No. | Result | Exposure time | Species | Method |
|---------------------------------|---------------------|------------------|---------|----------------------------------------------------------|
| Ethyl acetate 141-78-6 | slightly irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| Rosin 8050-09-7 | not irritating | | rabbit | OECD Guideline 405 (Acute Eye Irritation / Corrosion) |
| zinc oxide 1314-13-2 | slightly irritating | | rabbit | not specified |
| n-Hexane 110-54-3 | not irritating | | rabbit | not specified |

Respiratory or skin sensitization:

| Hazardous components CAS-No. | Result | Test type | Species | Method |
|---------------------------------|-----------------|------------------------------------------------|------------|-----------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | not sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| zinc oxide 1314-13-2 | not sensitising | Guinea pig maximisation test | guinea pig | OECD Guideline 406 (Skin Sensitisation) |
| n-Hexane 110-54-3 | not sensitising | Mouse local lymphnode assay (LLNA) | mouse | OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay) |

Germ cell mutagenicity:

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---------------------------------|----------|--------------------------------------------------------|--------------------------------------------|---------------------|--------------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| | negative | in vitro mammalian chromosome aberration test | with and without | | OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) |
| Ethyl acetate 141-78-6 | negative | oral: gavage | | hamster, Chinese | OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) |
| Rosin 8050-09-7 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| zinc oxide 1314-13-2 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | not specified |
| n-Hexane 110-54-3 | negative | bacterial reverse mutation assay (e.g Ames test) | with and without | | OECD Guideline 471 (Bacterial Reverse Mutation Assay) |
| | negative | mammalian cell gene mutation assay | with and without | | OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test) |
| n-Hexane 110-54-3 | negative | inhalation: vapour | | mouse | not specified |
| | negative | inhalation: vapour | | rat | not specified |

Carcinogenicity:

| Hazardous components CAS-No. | Result | Species | Sex | Exposure timeFrequency of treatment | Route of application | Method |
|---------------------------------|--------|---------|--------|-------------------------------------------|-------------------------|-------------------------------------------------|
| n-Hexane 110-54-3 | | mouse | female | 2 y 6 h/d; 5 d/w | inhalation: vapour | OECD Guideline 451 (Carcinogenicity Studies) |

Reproductive toxicity:

| Hazardous substances CAS-No. | Result / Classification | Species | Exposure time | Species | Method |
|---------------------------------|------------------------------------------------------------------|-----------------------------------------------------|------------------|---------|------------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | NOAEL P = 1.500 mg/kg | other inhalation: vapour | 94 d | rat | other guideline: |
| n-Hexane 110-54-3 | NOAEL P = 9000 ppm NOAEL F1 = 3000 ppm NOAEL F2 = 3000 ppm | Two generation study inhalation: vapour | 10 w | rat | OECD Guideline 416 (Two- Generation Reproduction Toxicity Study) |

Repeated dose toxicity

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---------------------------------|--------------------|-------------------------|----------------------------------------------|---------|-------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | NOAEL=900 mg/kg | oral: gavage | 90 ddaily | rat | EPA OTS 795.2600 (Subchronic Oral Toxicity Test) |
| Ethyl acetate 141-78-6 | NOAEL=1,28 mg/l | inhalation | 94 dcontinuous | rat | EPA OTS 798.2450 (90-Day Inhalation Toxicity) |
| n-Hexane 110-54-3 | NOAEL=586 mg/kg | oral: gavage | 90 d5 d/w | rat | not specified |
| n-Hexane 110-54-3 | NOAEL=500 ppm | inhalation: vapour | 90 d6 h/d; 5 d/w | mouse | OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day) |

SECTION 12: Ecological information**General ecological information:**

The mixture is classified based on the available hazard information for the ingredients as defined in the classification criteria for mixtures for each hazard class or differentiation in Annex I to Regulation (EC) No 1272/2008. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

Do not empty into drains / surface water / ground water.

12.1. Toxicity**Ecotoxicity:**

Toxic to aquatic life with long lasting effects.

| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|-------------------------------------------------------------|---------------|---------------|----------------------------|------------------|----------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | LC50 | 270 mg/l | Fish | 48 h | Leuciscus idus melanotus | DIN 38412-15 |
| Ethyl acetate 141-78-6 | EC50 | 164 mg/l | Daphnia | 48 h | Daphnia cucullata | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Ethyl acetate 141-78-6 | EC50 | > 2.000 mg/l | Algae | 96 h | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | NOEC | 2.000 mg/l | Algae | 96 h | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) not specified |
| Ethyl acetate 141-78-6 | EC10 | 2.900 mg/l | Bacteria | 18 h | | |
| Ethyl acetate 141-78-6 | NOEC | 2,4 mg/l | chronic Daphnia | 21 d | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |
| Methylcyclohexane 108-87-2 | EC50 | 147.000 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | LC50 | > 1 - 10 mg/l | Fish | | | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | EC50 | 3 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | EC50 | > 1 - 10 mg/l | Algae | | | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| Rosin 8050-09-7 | LC50 | > 1.000 mg/l | Fish | 96 h | Pimephales promelas | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Rosin 8050-09-7 | EC50 | 911 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Rosin 8050-09-7 | EC50 | > 100 mg/l | Algae | 72 h | Scenedesmus subspicatus (new name: Desmodesmus subspicatus) | DIN 38412-09 |
| zinc oxide 1314-13-2 | LC50 | > 1.000 mg/l | Fish | | Leuciscus idus | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| zinc oxide 1314-13-2 | NOEC | 0,017 mg/l | Algae | 72 h | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| | EC50 | 0,17 mg/l | Algae | 72 h | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | OECD Guideline 201 (Alga, Growth Inhibition Test) not specified |
| zinc oxide 1314-13-2 | NOEC | 500 mg/l | Bacteria | | | |
| n-Hexane 110-54-3 | LC50 | > 1 - 10 mg/l | Fish | | | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| n-Hexane 110-54-3 | EC50 | 2,1 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| n-Hexane 110-54-3 | EC50 | > 1 - 10 mg/l | Algae | | | OECD Guideline 201 (Alga, Growth Inhibition Test) |
| n-Hexane 110-54-3 | EC 50 | > 1 - 10 mg/l | Bacteria | | | OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test) |

12.2. Persistence and degradability

| Hazardous components CAS-No. | Result | Route of application | Degradability | Method |
|-------------------------------------------------------------|-----------------------------------------------------|-------------------------|---------------|-----------------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | readily biodegradable | aerobic | 100 % | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | readily biodegradable | aerobic | 89 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| Rosin 8050-09-7 | | aerobic | 36 - 46 % | OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test) |
| n-Hexane 110-54-3 | readily biodegradable, but failing 10-day window | aerobic | > 60 % | not specified |

12.3. Bioaccumulative potential / 12.4. Mobility in soil

| Hazardous components CAS-No. | LogPow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|-------------------------------------------------------------|---------|----------------------------------|------------------|---------|-------------|------------------------------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | 0,6 | | | | | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Methylcyclohexane 108-87-2 | 3,61 | | | | | not specified |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | 4 - 5,7 | | | | | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |
| Rosin 8050-09-7 | 3 - 6,2 | | | | | OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method) |
| n-Hexane 110-54-3 | 4 | | | | | not specified |

12.5. Results of PBT and vPvB assessment

| Hazardous components CAS-No. | PBT/vPvB |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Ethyl acetate 141-78-6 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Methylcyclohexane 108-87-2 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Hydrocarbon aliphatic C4-11 < 0,1% benzene 64742-49-0 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| Rosin 8050-09-7 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| zinc oxide 1314-13-2 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |
| n-Hexane 110-54-3 | Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria. |

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product disposal:

Dispose of waste and residues in accordance with local authority requirements.

Disposal of uncleaned packages:

Use packages for recycling only when totally empty.

Waste code

14 06 03 Other solvents and solvent mixtures

SECTION 14: Transport information**14.1. UN number**

| | |
|------|------|
| ADR | 1133 |
| RID | 1133 |
| ADN | 1133 |
| IMDG | 1133 |
| IATA | 1133 |

14.2. UN proper shipping name

| | |
|------|-------------------------------|
| ADR | ADHESIVES |
| RID | ADHESIVES |
| ADN | ADHESIVES |
| IMDG | ADHESIVES (Methylcyclohexane) |
| IATA | Adhesives |

14.3. Transport hazard class(es)

| | |
|------|---|
| ADR | 3 |
| RID | 3 |
| ADN | 3 |
| IMDG | 3 |
| IATA | 3 |

14.4. Packing group

| | |
|------|----|
| ADR | II |
| RID | II |
| ADN | II |
| IMDG | II |
| IATA | II |

14.5. Environmental hazards

| | |
|------|---------------------------|
| ADR | Environmentally Hazardous |
| RID | Environmentally Hazardous |
| ADN | Environmentally Hazardous |
| IMDG | Marine pollutant |
| IATA | not applicable |

14.6. Special precautions for user

| | |
|------|---------------------------------------------|
| ADR | Special provision 640D Tunnelcode: (D/E) |
| RID | Special provision 640D |
| ADN | Special provision 640D |
| IMDG | not applicable |
| IATA | not applicable |

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

| | |
|-------------------------------------|---------|
| VOC content | 78,52 % |
| (VOCV 814.018 VOC regulation CH) | |

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

National regulations/information (Germany):

| | |
|--------------------------------------|---------------------------------------------------------------|
| WGK: | 2, water-endangering product. (German VwVwS of May 17, 1999) |
| Storage class according to TRGS 510: | Classification in conformity with the calculation method 3 |

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

- H225 Highly flammable liquid and vapor.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H361f Suspected of damaging fertility.
- H373 May cause damage to organs through prolonged or repeated exposure.
- 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.

Further information:

This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

Label elements (DPD):

F - Highly flammable

Xi - Irritant

N - Dangerous for the environment



Risk phrases:

- R11 Highly flammable.
- R36/38 Irritating to eyes and skin.
- R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R66 Repeated exposure may cause skin dryness or cracking.
- R67 Vapours may cause drowsiness and dizziness.

Safety phrases:

- S2 Keep out of the reach of children.
- S9 Keep container in a well-ventilated place.
- S16 Keep away from sources of ignition - No smoking.
- S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S29 Do not empty into drains.
- S46 If swallowed, seek medical advice immediately and show this container or label.
- S51 Use only in well-ventilated areas.

Contains Rosin. May produce an allergic reaction.

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.

Annex - Exposure Scenarios:

Exposure Scenarios for ethyl acetate can be downloaded under the following link:
http://mysds.henkel.com/mysds/.490394..en.ANNEX_DE.19414935.0.DE.pdf
Alternatively they can be accessed on the internet site www.mysds.henkel.com by entering number 490394.

