# Safety Data Sheet according to Regulation (EC) No1907/2006



SDS No. : 204925
V004.0

Chemical Metal Resin

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

**1.1. Product identifier**
Chemical Metal Resin

**Contains:**
Styrene

**1.2. Relevant identified uses of the substance or mixture and uses advised against**
Intended use:
2K Filler paste

**1.3. Details of the supplier of the safety data sheet**
Henkel Limited
2 Bishop Square Business Park
AL109EY Herfordshire Hatfield

Great Britain

Phone: +44 1606 593933
Fax-no.: +44 1606 863762

ua-productsafety.uk@uk.henkel.com

**1.4. Emergency telephone number**
24 Hours Emergency Tel: +44 (0)1442 278497

## SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture**

**Classification (CLP):**

| | |
|---|---|
| Flammable liquids | Category 3 |
| H226 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 - repeated exposure | Category 1 |
| H372 Causes damage to organs through prolonged or repeated exposure. | |

**Classification (DPD):**

Flammable
R10 Flammable.
Xn - Harmful
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
Xn - Harmful
R20 Harmful by inhalation.
Xi - Irritant
R36/38 Irritating to eyes and skin.

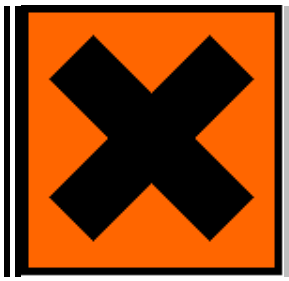
**2.2. Label elements**

**Label elements (CLP):**

| | |
|---|---|
| **Hazard pictogram:** |  |
| **Signal word:** | Danger |
| **Hazard statement:** | H226 Flammable liquid and vapor.<br>H315 Causes skin irritation.<br>H319 Causes serious eye irritation.<br>H372 Causes damage to organs through prolonged or repeated exposure. |
| **Precautionary statement:** | ***For consumer use only: P101 If medical advice is needed, have product container or label at hand. P102 Keep out of reach of children. P501 Dispose of waste and residues in accordance with local authority requirements*** |
| **Precautionary statement: Prevention** | P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P261 Avoid breathing vapours. |
| **Precautionary statement: Response** | P302+P352 IF ON SKIN: Wash with plenty of soap and water.<br>P337+P313 If eye irritation persists: Get medical advice/attention. |

**Label elements (DPD):**

Xn - Harmful



Risk phrases:

R10 Flammable.
R20 Harmful by inhalation.
R36/38 Irritating to eyes and skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Safety phrases:

S2 Keep out of the reach of children.
S16 Keep away from sources of ignition - No smoking.
S23 Do not breathe vapour.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water and soap.

Additional labeling:

For consumer use only: S2 Keep out of the reach of children.
S46 If swallowed, seek medical advice immediately and show this container or label.

Contains:

Styrene

**2.3. Other hazards**

None if used properly.

## SECTION 3: Composition/information on ingredients

**General chemical description:**

Sealant

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

| Hazardous components<br>CAS-No. | EC Number<br>REACH-Reg No. | content | Classification |
|---|---|---|---|
| Styrene<br>100-42-5 | 202-851-5<br>01-2119457861-32 | > 12,5- < 20 % | Flammable liquids 3<br>H226<br>Acute toxicity 4; Inhalation<br>H332<br>Aspiration hazard 1<br>H304<br>Serious eye irritation 2<br>H319<br>Skin irritation 2<br>H315<br>Specific target organ toxicity - single exposure 3<br>H335<br>Specific target organ toxicity - repeated exposure 1; Inhalation<br>H372<br>Chronic hazards to the aquatic environment 3<br>H412 |

**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.**

**Declaration of ingredients according to DPD (EC) No 1999/45:**

| Hazardous components<br>CAS-No. | EC Number<br>REACH-Reg No. | content | Classification |
|---|---|---|---|
| Styrene<br>100-42-5 | 202-851-5<br>01-2119457861-32 | > 12,5 - < 20 % | R10<br>Xn - Harmful; R20, R48/20, R65<br>Xi - Irritant; R36/37/38 |

**For full text of the R-Phrases indicated by codes 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**

Inhalation:
Move to fresh air. If symptoms persist, seek medical advice.

Skin contact:
Rinse with running water and soap.
Obtain medical attention if irritation persists.

Eye contact:
Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

Ingestion:
Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

**4.2. Most important symptoms and effects, both acute and delayed**
EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

**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

**Extinguishing media which must not be used for safety reasons:**
None known

**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.
In case of fire, keep containers cool with water spray.
Oxides of carbon, oxides of nitrogen, irritating organic vapors.

**5.3. Advice for firefighters**
Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA).

**Additional information:**
Do not inhale vapors and fumes.

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures**

Remove sources of ignition.
Ensure adequate ventilation.
Wear protective equipment.
Avoid contact with skin and eyes.

**6.2. Environmental precautions**

Do not let product enter drains.

**6.3. Methods and material for containment and cleaning up**

For large spills absorb onto inert absorbent material and place in sealed container for disposal.
For small spills wipe up with paper towel and place in container for disposal.
Wash spillage site thoroughly with soap and water or detergent solution.

**6.4. Reference to other sections**

See advice in section 8

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Do not inhale vapors and fumes.
Avoid skin and eye contact.
Keep away from sources of ignition - no smoking.
Use only in well-ventilated areas.
See advice in section 8
Avoid open flames and sources of ignition.
No smoking.

Hygiene measures:

Good industrial hygiene practices should be observed.
Do not eat, drink or smoke while working.
Wash hands before work breaks and after finishing work.

**7.2. Conditions for safe storage, including any incompatibilities**

Keep away from sources of ignition.
Store in a cool, well-ventilated place.

**7.3. Specific end use(s)**

2K Filler paste

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

**Occupational Exposure Limits**

Valid for
Great Britain

| Ingredient | ppm | mg/m³ | Type | Category | Remarks |
|---|---|---|---|---|---|
| TALC, RESPIRABLE DUST<br>14807-96-6 | | 1 | Time Weighted Average (TWA): | | EH40 WEL |
| CALCIUM CARBONATE, INHALABLE DUST<br>1317-65-3 | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| CALCIUM CARBONATE, RESPIRABLE DUST<br>1317-65-3 | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| LIMESTONE, RESPIRABLE<br>MARBLE, RESPIRABLE<br>1317-65-3 | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| LIMESTONE, TOTAL INHALABLE<br>MARBLE, TOTAL INHALABLE<br>1317-65-3 | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| STYRENE<br>100-42-5 | 250 | 1.080 | Short Term Exposure Limit (STEL): | | EH40 WEL |
| STYRENE<br>100-42-5 | 100 | 430 | Time Weighted Average (TWA): | | EH40 WEL |
| ROUGE, RESPIRABLE<br>1309-37-1 | | 4 | Time Weighted Average (TWA): | | EH40 WEL |
| ROUGE, TOTAL INHALABLE<br>1309-37-1 | | 10 | Time Weighted Average (TWA): | | EH40 WEL |
| IRON OXIDE, FUME (AS FE)<br>1309-37-1 | | 5 | Time Weighted Average (TWA): | | EH40 WEL |
| IRON OXIDE, FUME (AS FE)<br>1309-37-1 | | 10 | Short Term Exposure Limit (STEL): | | EH40 WEL |

**Predicted No-Effect Concentration (PNEC):**

| Name on list | Environmental Compartment | Exposure period | Value | | | | Remarks |
|---|---|---|---|---|---|---|---|
| | | | mg/l | ppm | mg/kg | others | |
| Styrene<br>100-42-5 | aqua (freshwater) | | | | | 0,028 mg/L | |
| Styrene<br>100-42-5 | aqua (marine water) | | | | | 0,0028 mg/L | |
| Styrene<br>100-42-5 | aqua (intermittent releases) | | | | | 0,04 mg/L | |
| Styrene<br>100-42-5 | STP | | | | | 5 mg/L | |
| Styrene<br>100-42-5 | sediment (freshwater) | | | | 0,614 mg/kg | | |
| Styrene<br>100-42-5 | sediment (marine water) | | | | 0,0614 mg/kg | | |
| Styrene<br>100-42-5 | soil | | | | 0,2 mg/kg | | |

**Derived No-Effect Level (DNEL):**

| Name on list | Application Area | Route of Exposure | Health Effect | Exposure Time | Value | Remarks |
|---|---|---|---|---|---|---|
| Styrene 100-42-5 | worker | inhalation | Acute/short term exposure - systemic effects | | 289 mg/m3 | |
| Styrene 100-42-5 | worker | inhalation | Acute/short term exposure - local effects | | 306 mg/m3 | |
| Styrene 100-42-5 | worker | Dermal | Long term exposure - systemic effects | | 406 mg/kg | |
| Styrene 100-42-5 | worker | inhalation | Long term exposure - systemic effects | | 85 mg/m3 | |
| Styrene 100-42-5 | general population | inhalation | Acute/short term exposure - systemic effects | | 174,25 mg/m3 | |
| Styrene 100-42-5 | general population | inhalation | Acute/short term exposure - local effects | | 182,75 mg/m3 | |
| Styrene 100-42-5 | general population | Dermal | Long term exposure - systemic effects | | 343 mg/kg | |
| Styrene 100-42-5 | general population | inhalation | Long term exposure - systemic effects | | 10,2 mg/m3 | |
| Styrene 100-42-5 | general population | oral | Long term exposure - systemic effects | | 2,1 mg/kg | |

**Biological Exposure Indices:**
None

**8.2. Exposure controls:**

Engineering controls:
Ensure good ventilation/extraction.

Respiratory protection:
An approved mask or respirator fitted with an organic vapour cartridge should be worn if the product is used in a poorly ventilated area
Ensure adequate ventilation.
Filter type: A

Hand protection:
Chemical-resistant protective gloves (EN 374).
Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):
nitrile rubber (NBR; >= 0.4 mm thickness)
This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Safety glasses with sideshields or chemical safety goggles should be worn if there is a risk of splashing.

Skin protection:
Wear suitable protective clothing.

## SECTION 9: Physical and chemical properties

**9.1. Information on basic physical and chemical properties**

| | |
|---|---|
| Appearance | paste<br>pasty<br>grey |
| Odor | characteristic |
| Odour threshold | No data available / Not applicable |
| pH | No data available / Not applicable |
| Initial boiling point | > 100,0 °C (> 212 °F) |
| Flash point | 32 °C (89.6 °F); no method |
| Decomposition temperature | No data available / Not applicable |
| Vapour pressure | No data available / Not applicable |
| Density<br>(23 °C (73.4 °F)) | 1,6700 g/cm3 |
| Bulk density | No data available / Not applicable |
| Viscosity<br>(Physica Rheolab) | 1.200 - 4.200 pa.s |
| Viscosity (kinematic) | No data available / Not applicable |
| Explosive properties | No data available / Not applicable |
| Solubility (qualitative)<br>(23 °C (73.4 °F); Solvent: Water) | Insoluble |
| 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 | No data available / Not applicable |
| 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 properly.

**10.2. Chemical stability**
Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**
See section reactivity

**10.4. Conditions to avoid**
Heat, flames, sparks and other sources of ignition.

**10.5. Incompatible materials**
None if used properly.

**10.6. Hazardous decomposition products**
carbon oxides.

## 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 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**STOT-repeated exposure:**
Causes damage to organs through prolonged or repeated exposure.

**Oral toxicity:**
May cause irritation to the digestive tract.

**Skin irritation:**
Causes skin irritation.

**Eye irritation:**
Causes serious eye irritation.

**Acute oral toxicity:**

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Styrene 100-42-5 | Acute toxicity estimate (ATE) | 6.600 mg/kg | oral | | | Expert judgement |
| Styrene 100-42-5 | LD50 | 6.600 - 8.000 mg/kg | | | rat | |

**Acute inhalative toxicity:**

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Styrene 100-42-5 | LC50 | 11,8 mg/l | inhalation | 4 h | rat | |

**Acute dermal toxicity:**

| Hazardous components CAS-No. | Value type | Value | Route of application | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Styrene 100-42-5 | LD50 | > 2.000 mg/kg | dermal | | rat | OECD Guideline 402 (Acute Dermal Toxicity) |

**Respiratory or skin sensitization:**

| Hazardous components CAS-No. | Result | Test type | Species | Method |
|---|---|---|---|---|
| Styrene 100-42-5 | not sensitising | Guinea pig maximisation test | guinea pig | Magnusson and Kligman Method |

**Germ cell mutagenicity:**

| Hazardous components CAS-No. | Result | Type of study / Route of administration | Metabolic activation / Exposure time | Species | Method |
|---|---|---|---|---|---|
| Styrene 100-42-5 | positive | sister chromatid exchange assay in mammalian cells | with and without | | OECD Guideline 479 (Genetic Toxicology: In Vitro Sister Chromatid Exchange Assay in Mammalian Cells) |
| Styrene 100-42-5 | negative | inhalation: vapour | | mouse | |

**Carcinogenicity:**

| Hazardous components CAS-No. | Result | Species | Sex | Exposure timeFrequency of treatment | Route of application | Method |
|---|---|---|---|---|---|---|
| Styrene 100-42-5 | not carcinogenic | rat | male/female | 104 weeks; 9 or 10 rats per... 6 hours/day, 5 days/week | inhalation: vapour | OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies) |

**Repeated dose toxicity**

| Hazardous components CAS-No. | Result | Route of application | Exposure time / Frequency of treatment | Species | Method |
|---|---|---|---|---|---|
| Styrene 100-42-5 | NOAEL=1.000 mg/kg | oral: gavage | daily (5 d/w) | rat | |
| Styrene 100-42-5 | LOAEL=2.000 mg/kg | oral: gavage | daily (5 d/w) | rat | |
| Styrene 100-42-5 | | inhalation: vapour | 4 w 6 h/d, 5 d/w | rat | |

## 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 1272/2008/EC. Relevant available health/ecological information for the substances listed under Section 3 is provided in the following.

**12.1. Toxicity**

**Ecotoxicity:**

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

| Hazardous components CAS-No. | Value type | Value | Acute Toxicity Study | Exposure time | Species | Method |
|---|---|---|---|---|---|---|
| Styrene 100-42-5 | LC50 | 10 mg/l | Fish | 96 h | Pimephales promelas | OECD Guideline 203 (Fish, Acute Toxicity Test) |
| Styrene 100-42-5 | EC50 | 4,7 mg/l | Daphnia | 48 h | Daphnia magna | OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
| Styrene 100-42-5 | EC50 | 6,3 mg/l | Algae | 96 h | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | EPA OTS 797.1050 (Algal Toxicity, Tiers I and II) |
| | EC10 | 0,28 mg/l | Algae | 96 h | Selenastrum capricornutum (new name: Pseudokirchnerella subcapitata) | EPA OTS 797.1050 (Algal Toxicity, Tiers I and II) |
| Styrene 100-42-5 | NOEC | 1,01 mg/l | chronic Daphnia | 21 d | Daphnia magna | OECD 211 (Daphnia magna, Reproduction Test) |

**12.2. Persistence and degradability**

**Persistence and Biodegradability:**

The product is not biodegradable.

| Hazardous components CAS-No. | Result | Route of application | Degradability | Method |
|---|---|---|---|---|
| Styrene 100-42-5 | readily biodegradable | aerobic | 87 % | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |

**12.3. Bioaccumulative potential / 12.4. Mobility in soil**

**Bioaccumulative potential:**

No data available for the product.

| Hazardous components CAS-No. | LogKow | Bioconcentration factor (BCF) | Exposure time | Species | Temperature | Method |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Styrene<br>100-42-5<br>Styrene<br>100-42-5 | 2,96 | 74 | | | 25 °C | OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method) |

**12.5. Results of PBT and vPvB assessment**

No data available.

**12.6. Other adverse effects**

No data available.

## SECTION 13: Disposal considerations

**13.1. Waste treatment methods**

Product disposal:

Incineration under controlled conditions is recommended.

Disposal of uncleaned packages:

After use, tubes, cartons and bottles containing residual product should be disposed of as chemically contaminated waste in an authorised legal land fill site or incinerated.

Waste code

08 04 09 waste adhesives and sealants containing organic solvents and other dangerous substances

## SECTION 14: Transport information

**14.1. UN number**

| | |
|---|---|
| ADR | 2055 |
| RID | 2055 |
| ADNR | 2055 |
| IMDG | 2055 |
| IATA | 2055 |

**14.2. UN proper shipping name**

| | |
|---|---|
| ADR | STYRENE MONOMER, STABILIZED (solution) |
| RID | STYRENE MONOMER, STABILIZED |
| ADNR | STYRENE MONOMER, STABILIZED |
| IMDG | STYRENE MONOMER, STABILIZED (EH&S) |
| IATA | Styrene monomer, stabilized (32337234) |

**14.3. Transport hazard class(es)**

| | |
|---|---|
| ADR | 3 |
| RID | 3 |
| ADNR | 3 |
| IMDG | 3 |
| IATA | 3 |

**14.4. Packaging group**

| | |
|---|---|
| ADR | III |
| RID | III |
| ADNR | III |
| IMDG | III |
| IATA | III |

**14.5. Environmental hazards**

| | |
|---|---|
| ADR | not applicable |
| RID | not applicable |
| ADNR | not applicable |
| IMDG | not applicable |
| IATA | not applicable |

**14.6. Special precautions for user**

| | |
|---|---|
| ADR | not applicable<br>Tunnelcode: (D/E) |
| RID | not applicable |
| ADNR | not applicable |
| IMDG | not applicable |
| IATA | not applicable |

When transporting as a set (component A and B) then the following dangerous good classification is used: UN 3269 Polyester resin kit, 3, III.

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 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 (1999/13/EC) | 14,8 % |

**VOC Paints and Varnishes (EU):**

| | |
|---|---|
| Product (sub)category: | Bodyfiller/stopper |
| Phase I (from 1.1.2007): | 250,00 g/l |
| max. VOC content: | 130 g/l |

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

## 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:

R10 Flammable.
R20 Harmful by inhalation.
R36/37/38 Irritating to eyes, respiratory system and skin.
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R65 Harmful: may cause lung damage if swallowed.
H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
H412 Harmful 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.