

SAFETY DATA SHEET

SÜDWEST Heizkörper-Spray

| Ref. Rev. no. | 130000006813/ 1.0 |
|------------------|----------------------|
| Revised on | 19.10.2016 |
| Printing date | 28.03.2017 |

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

| 1.1 Product identifier Trade name | SÜDWEST Heizkörper-Spray |
|--|---|
| 1.2 Relevant identified uses of the substance or mixture and uses advised against | Coating compound/ Surface coating/ paint |
| Uses advised against | This information is not available. |
| 1.3 Details of the supplier of the safety data sheet | SÜDWEST Lacke + Farben GmbH & Co.KG Iggelheimer Str. 13 D - 67459 Böhl-Iggelheim Telephone: +49 6324/709-0 Telefax: +49 6324/709-175 www.suedwest.de |
| E-mail address of person responsible for the SDS European Union | sdb@suedwest.de |
| 1.4 Emergency telephone number European Union | Phone: +44 (0)1235 239 670 |

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1

H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

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Eye irritation, Category 2 H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

| Signal word | Danger | |
|--------------------------|--------------------------|--|
| Hazard statements | H222 H229 | Extremely flammable aerosol. Pressurised container: May burst if heated. |
| | H319 | Causes serious eye irritation. |
| Precautionary statements | P101 | If medical advice is needed, have product container or label at hand. |
| | P102 | Keep out of reach of children. |
| | Prevention: | |
| | P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | P211 | Do not spray on an open flame or other ignition source. |
| | P251 | Do not pierce or burn, even after use. |
| | P260 | Do not breathe spray. |
| | Response: | |
| | P305 + P351 + I | P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| | Storage: | |
| | P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. |
| | Disposal: P501 | Contents/container to be disposed of through approved disposal contractor or taken to municipal collection point. |

2.3 Other hazards

Results of PBT and vPvB assessment Not applicable

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

| Chemical name | CAS-No. | Classification | Concentration (% |
|--|---------------------|-------------------|------------------|
| | EC-No. | (REGULATION (EC) | w/w) |
| | Registration number | No 1272/2008) | |
| isopropanol | 67-63-0 | Flam. Liq.2; H225 | ≥ 5 - < 10 |
| | 200-661-7 | Eye Irrit.2; H319 | |
| | | STOT SE3; H336 | |
| n-propanol | 71-23-8 | Flam. Liq.2; H225 | ≥ 1 - < 2,5 |
| | 200-746-9 | Eye Dam.1; H318 | |
| | 01-21194867671-29- | STOT SE3; H336 | |
| | XXXX | | |
| Substances with a workplace exposure limit : | | | |
| dimethyl ether | 115-10-6 | Flam. Gas1; H220 | ≥ 25 - < 50 |
| | 204-065-8 | Press. GasH280 | |
| | 01-2119472128-37- | | |
| | XXXX | | |
| | | | |

For explanation of abbreviations see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

| General advice | When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice. |
|----------------|--|
| Inhalation | Move to fresh air in case of accidental inhalation of vapours or decomposition products. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If symptoms persist, call a physician. |
| Skin contact | Take off contaminated clothing and shoes immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. If skin irritation persists, call a physician. |
| Eye contact | In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for |

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at least 15 minutes. Seek medical advice.

Ingestion

Rinse mouth with water. If swallowed, seek medical advice immediately and show this container or label. Keep at rest. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment

Treat symptomatically. No information available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

| Suitable extinguishing media | CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistantfoam. |
|--------------------------------|---|
| Unsuitable extinguishing media | High volume water jet |
| 5.2 Special hazards | Fire may cause evolution of: |
| arising from the | Carbon monoxide |
| substance or mixture | Carbon dioxide (CO2) |
| | Nitrogen oxides (NOx) |
| | Exposure to decomposition products may be a hazard to health. |
| | Cool closed containers exposed to fire with water spray. |
| 5.3 Advice for firefighters | In the event of fire, wear self-contained breathing apparatus. Fight fire with normal precautions from a reasonable distance. |
| Additional advice | Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. |

SECTION 6: ACCIDENTAL RELEASE MEASURES

| 6.1 Personal | Remove all sources of ignition. |
|-------------------------------|---|
| precautions, protective | Ensure adequate ventilation. |
| equipment and | Do not breathe vapour. |
| emergency procedures | Prevent unauthorized access. |
| 6.2 Environmental precautions | The product should not be allowed to enter drains, water courses or the soil. |

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If the product contaminates rivers and lakes or drains inform respective authorities.

| 6.3 Methods and material for containment and cleaning up | Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Do not flush with water or aqueous cleansing agents Clean contaminated surface thoroughly. Dispose of contaminated material as waste according to item 13. |
|---|---|
| 6.4 Reference to other sections | Refer to protective measures listed in sections 7 and 8. |

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

| Advice on safe handling | Comply with the statutory regulations on health and safety at work. Avoid formation of aerosol. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limit values. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. All metal parts of the mixing and processing equipment must be earthed. Operators should wear antistatic footwear and clothing. No sparking tools should be used. |
|-------------------------|---|
| Hygiene measures | Do not breathe spray, vapour. Take off immediately all contaminated clothing. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. After washing hands, replenish lost skin oil by means of oily skin ointment. When using do not eat, drink or smoke. |

7.2 Conditions for safe storage, including any incompatibilities

| Requirements for | Store in original container. |
|-------------------|---|
| storage areas and | Keep container tightly closed. Never use pressure to empty: |
| containers | container is not a pressure vessel. Nosmoking. |

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|-----------------------------|--|---|
| SÜDWEST Hei | zkörper-Spray | |
| Advice on protection | Prevent unauthorized access. Containers which are opened n and kept upright to prevent leal Keep in a well-ventilated place. Protect from frost, heat and sur Vapours are heavier than air ar | kage. nlight. |
| against fire and explosion | Vapours may form explosive m Keep away from sources of ign Take measures to prevent the charge. | ixtures with air. ition - No smoking. |
| Advice on common storage | Keep away from combustible m Keep away from food, drink and Keep away from oxidizing ager alkaline materials. | d animal feedingstuffs. |
| 7.3 Specific end use(s) | For further information, see als the product. | o Technical Data Sheet for |

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Exposure limit(s)

| Components | | CAS-No. |
|--------------------|---------------------------|-------------------------|
| Basis | Туре: | Control |
| | | parameters |
| dimethyl ether | | 115-10-6 |
| 2000/39/EC | Limit Value - eight hours | 1.920 mg/m ³ |
| 2000/39/EC | Limit Value - eight hours | 1.000 ppm |
| Additional advice: | Indicative | |

The lists that were valid during the creation were used as basis.

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable this shoud beachieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates solvent vapour below the occupational exposure limit values, suitable respiratory - protection must be worn. Washing facilities / water for rinsing eyes and skin should be available.

Individual protection measures, such as personal protective equipment

a) Eye/face protection Safety glasses with side-shields conforming to EN166

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| b) Skin protection | |
|---------------------------|---|
| Hand protection | Break through time: 480 min Minimum thickness: 0,4 mm Gloves made of nitrile rubber,e.g. KCL 730 Camatril® Velours (Kächele-Cama-Latex GmbH, Hotline: 0049(0)6659- 87-300, kcl-uk@kcl.de), or equivalent. Skin that comes into contact with the product should be treated with protective cream. After such contact, the product concerned should under no circumstances be used. |
| | The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. |
| Body Protection | Preventive skin protection Long sleeved clothing Personal should wear antistatic clothings made of natural fiber or of high temperature resistant synthehic fiber. All parts of the body should be washed after contact. |
| c) Respiratory protection | When workers are facing concentrations above the occupational exposure limit values they must use appropriate certified respirators. Breathing protection equipment required in inadequately ventilated places and during spraying. In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Combination filter A-P2 Respiratory protection complying with EN 14387. |
| | |

Environmental exposure controls

General advice The product should not be allowed to enter drains, water courses or the soil. If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| Appearance | aerosol |
|-----------------|----------------|
| Colour | various |
| Odour | characteristic |
| Odour Threshold | not determined |

| рН | No data available |
|--|---|
| Melting point/freezing point | not determined |
| Initial boiling point and boiling range | Not applicable |
| Flash point | Not applicable |
| Evaporation rate | Not applicable |
| Flammability (solid, gas) | Extremely flammable aerosol. |
| Lower explosion limit | 3,0 %(V) |
| Upper explosion limit | 18,6 %(V) |
| Vapour pressure | 3.400 hPa, 20 °C |
| Vapour density | No data available |
| Density | No data available |
| Solubility(ies)(Water) | immiscible |
| Partition coefficient: n- octanol/water | not determined |
| Auto-ignition temperature | not auto-flammable |
| Ignition temperature | 235 °C |
| Viscosity, dynamic | No data available |
| Explosive properties Oxidizing properties | In use may form flammable/explosive vapour-air mixture. Not applicable |

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9.2 Other information

| Flow time | No data available |
|---------------|-------------------|
| Solid content | 20,4 % |

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

temperature

Hazardous reactions No dangerous reaction known under conditions of normal use. Vapours may form explosive mixture with air. 10.4 Conditions to avoid Conditions to avoid Direct sources of heat. Strong sunlight for prolonged periods. **10.5 Incompatible materials** Materials to avoid Strong acids and strong bases Strong oxidizing agents **10.6 Hazardous decomposition products** Hazardous decomposition No decomposition if stored and applied as directed. products Decomposition No data available

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SECTION 11: TOXICOLOGICAL INFORMATION

| 11.1 Information on toxicological effects | |
|---|---|
| Product | |
| Acute oral toxicity | Based on available data, the classification criteria are not met. |
| Acute inhalation toxicity | Based on available data, the classification criteria are not met. |
| Acute dermal toxicity | Based on available data, the classification criteria are not met. |
| Skin corrosion/irritation | Based on available data, the classification criteria are not met. |
| Serious eye damage/eye irritation | Causes serious eye irritation. |
| Respiratory or skin sensitisation | Based on available data, the classification criteria are not met. |

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Germ cell mutagenicity Genotoxicity in vitro Based on available data, the classification criteria are not met. Carcinogenicity Based on available data, the classification criteria are not met. Reproductive toxicity Effects on fertility Based on available data, the classification criteria are not met. **Developmental Toxicity** Based on available data, the classification criteria are not met. STOT - single exposure Based on available data, the classification criteria are not met. 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. Human experience Exposure to component solvent vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects. Such as: mucous membrane irritation, respiratory system irritation, adverse effects on kidney, liver and central nervous system. Symptoms and signs: headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases loss of consciousness. Long-term or repeated contact with the product leads to degreasing of the skin and can cause nonallergenic contact skin damage (contact dermatitis) and / or the resorption of substances. Solvent sprays can cause irritation and reversible damage to the eye. Further information The product itself has not been tested. The mixture is classified in accordance with Annex I to EC Directive 1272/2008. (See sections 2 and 3 for details).

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Serious eye damage/eye
irritationCauses serious eye irritation.STOT - single exposureMay cause drowsiness or dizziness.**n-propanol :**
Serious eye damage/eye
irritationCauses serious eye damage.STOT - single exposureMay cause drowsiness or dizziness.

SECTION 12: ECOLOGICAL INFORMATION

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12.1 Toxicity

Product:

Toxicity to fish

No data available

12.2 Persistence and degradability

Product:

Biodegradability

No data available

12.3 Bioaccumulative potential

Product:

Bioaccumulation No data available

Components:

dimethyl ether : Partition coefficient: noctanol/water

log Pow: 0,1

12.4 Mobility in soil

Product:

Mobility No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Additional ecological information

Do not allow product to enter into ground water, bodies of water or sewage systems.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

| Product | The user is responsible for proper coding and marking of any waste. When used as recommended, the waste code can be selected according to the code of the European Waste Catalogue (EWC), category 17.09 "Other Construction and Demolition Waste" If recycling is not practicable, dispose of in compliance with local regulations. |
|----------------------------------|---|
| Contaminated packaging | Empty packaging should be recycled through disposal systems. |
| Waste key for the unused product | 08 01 11*: Paint and varnish waste containing organic solvents or other dangerous substances |
| | : (*) hazardous waste in terms of the European directive 91/689/EEC |

SECTION 14: TRANSPORT INFORMATION

| 14.1 UN number | |
|-------------------------------|------|
| ADR | 1950 |
| IMDG | 1950 |
| ΙΑΤΑ | 1950 |
| 14.2 LIN proper chinging name | |

| 14.2 UN proper shipp | bing name |
|----------------------|-----------|
| ADR | AEROSOLS |

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| IMDG | AEROSOLS |
|-----------------------------------|---------------------|
| ΙΑΤΑ | Aerosols, flammable |
| 14.3 Transport hazard class(| es) |
| ADR | 2.1 |
| IMDG | 2.1 |
| ΙΑΤΑ | 2.1 |
| 14.4 Packing group ADR | |
| Packing group | Not Assigned |
| Classification Code | 5F |
| Labels | 2.1 |
| Tunnel restriction code | (D) |
| IMDG | |
| Labels | 2.1 |
| EmS number | F-D, S-U |
| ΙΑΤΑ | |
| Labels | 2.1 |
| 14.5 Environmental hazards ADR | |
| Environmentally hazardous | no |
| IMDG | |
| Marine pollutant | no |

14.6 Special precautions for user

Remarks

This information is not available.

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

| SAFETY DATA SHEET Macondation Milling and the second macondation Milling and the secon | |
|--|--|
| Remarks | Not applicable |
| ditional advice | |
| ADR | ADR: Up to 1 I per inner package, transport as limited |
| IMDG | quantity in accordance with ADR 3.4. IMDG: Up to 1 I per inner package, transport as limited quantity in accordance with IMDG Code 3.4. |
| SI | ECTION 15: REGULATORY INFORMATION |
| 15.1 Safety, health and e substance or mixture | environmental regulations/legislation specific for the |
| Directive 2010/75/EU | 60,4 % |
| Directive 2004/42/EC | |
| Other regulations | does not fall under Directive 2004/42/EC Comply with the statutory regulations on health and safety at work. |
| | Take note of Dir 94/33/EC on the protection of young people at work. Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers. |

pardonaa with Deculation (CC)

15.2 Chemical Safety Assessment

This information is not available.

SECTION 16: OTHER INFORMATION

Changes from the previous version are indicated by markings in the left-hand margin.

The information in this Safety Data Sheet corresponds to our present state of knowledge and conforms to both national and EU legislation. The user's working conditions are, however, beyond our knowledge and control. The user is responsible for complying with all necessary legal requirements. The information in this Safety Data Sheet describes the safety requirements of our product and does not constitute any assurance of product properties.

Full text of H-Statements

| H220 H225 H280 | Extremely flammable gas. Highly flammable liquid and vapour. Contains gas under pressure; may explode if heated. | |
|----------------------------------|--|--|
| H318 | : Causes serious eye damage. | |
| H319 | : Causes serious eye irritation. | |
| H336 | : May cause drowsiness or dizziness. | |
| Full text of other abbreviations | | |
| Eye Dam. | : Serious eye damage | |
| Eye Irrit. | : Eye irritation | |
| - | — · · · | |

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| Eye Irrit. | : Eye irritation |
|------------|--|
| Flam. Gas | : Flammable gases |
| Flam. Liq. | : Flammable liquids |
| Press. Gas | : Gases under pressure |
| STOT SE | : Specific target organ toxicity - single exposure |

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP -Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation: DSL - Domestic Substances List (Canada): ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer: IATA - International Air Transport Association: IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration: ICAO - International Civil Aviation Organization: IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. -Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS -Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

| SAFETY DATA SHEET | In accordance with Regulation (EC) No. 1907/2006 |
|--------------------------|---|
| SÜDWEST Heizkörper-Spray | |

Other information The assessment was carried out in accordance with Article 6 (5) and Appendix I of EC Directive no. 1272/2008.

It is possible in the interim period that you may find different markings on packaging compared to the Material Safety Data Sheet until stocks have been used up. We ask for your understanding in this matter.

Department issuing MSDS REG_EU / EN sdb@suedwest.de