

**Safety Data Sheet**

according to UK REACH Regulation

WS-Galvanal®

Revision date: 12.12.2022

Product code: 3888

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

WS-Galvanal®

UFI: 7PW5-A9YV-9VJ2-MUCM

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**industrial paint
Paint, Varnish.**Uses advised against**

Do not use for products which come into contact with the food stuffs.

1.3. Details of the supplier of the safety data sheet

| | | |
|-------------------------|---|---------------------------|
| Company name: | W+S GmbH Lackchemie und Aerosol-Technik | |
| Street: | Am Sportplatz 5 | |
| Place: | D-63791 Karlstein-Dettingen | |
| Telephone: | +49 6188 9575-0 | Telefax: +49 6188 9575-30 |
| e-mail: | info@ws-lackchemie.de | |
| Responsible Department: | Abt. Produkt / Sicherheit | |

1.4. Emergency telephone number: +49 551-19240 GIZ-Nord Poisons Centre**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**Aerosol 1; H222-H229
Skin Irrit. 2; H315
Eye Irrit. 2; H319

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Signal word:** Danger**Pictograms:****Hazard statements**

| | |
|------|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |

Precautionary statements

| | |
|-----------|--|
| P211 | Do not spray on an open flame or other ignition source. |
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P251 | Do not pierce or burn, even after use. |
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |

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Keep out of reach of children.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Chemical characterization**

Aerosole

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|---|--------------|----------|-------------|
| | EC No | Index No | REACH No | |
| | Classification (GB CLP Regulation) | | | |
| 74-98-6 | propane | | | 20 - < 25 % |
| | 200-827-9 | 601-003-00-5 | | |
| | Flam. Gas 1; H220 | | | |
| 106-97-8 | butane | | | 20 - < 25 % |
| | 203-448-7 | 601-004-00-0 | | |
| | Flam. Gas 1; H220 | | | |
| 141-78-6 | ethyl acetate | | | 10 - < 15 % |
| | 205-500-4 | 607-022-00-5 | | |
| | Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066 | | | |
| 1330-20-7 | xylene | | | 10 - < 15 % |
| | 215-535-7 | 601-022-00-9 | | |
| | Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2; H226 H332 H312 H315 | | | |
| 100-41-4 | ethylbenzene | | | 1 - < 5 % |
| | 202-849-4 | 601-023-00-4 | | |
| | Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304 | | | |
| 122-51-0 | Triethylorthoformiat | | | 1 - < 5 % |
| | 204-550-4 | | | |
| | Skin Irrit. 2, Eye Irrit. 2; H315 H319 | | | |
| 78-83-1 | 2-methylpropan-1-ol; iso-butanol | | | 1 - < 5 % |
| | 201-148-0 | 603-108-00-1 | | |
| | Flam. Liq. 3, Skin Irrit. 2, Eye Dam. 1, STOT SE 3, STOT SE 3; H226 H315 H318 H335 H336 | | | |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|-----------|--|----------------------------------|-------------|
| | Specific Conc. Limits, M-factors and ATE | | |
| 106-97-8 | 203-448-7 | butane | 20 - < 25 % |
| | inhalation: LC50 = 658 ppm (gases) | | |
| 1330-20-7 | 215-535-7 | xylene | 10 - < 15 % |
| | inhalation: ATE = 11 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: ATE = 1100 mg/kg | | |
| 100-41-4 | 202-849-4 | ethylbenzene | 1 - < 5 % |
| | inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 1,5 mg/l (dusts or mists); dermal: LD50 = 15400 mg/kg; oral: LD50 = 3500 mg/kg | | |
| 78-83-1 | 201-148-0 | 2-methylpropan-1-ol; iso-butanol | 1 - < 5 % |
| | inhalation: LC50 = > 24 mg/l (vapours); dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 2830 mg/kg | | |

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). No administration in cases of unconsciousness or cramps.

After inhalation

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Put victim at rest, cover with a blanket and keep warm. If victim is at risk of losing consciousness, position and transport on their side.

After contact with skin

Take off immediately all contaminated clothing, including underwear and shoes. Wash thoroughly the body (shower or bath). After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes

If product gets into the eye, keep eyelid open and rinse immediately with large quantities of water, for at least 5 minutes. Subsequently consult an ophthalmologist.

After ingestion

Call a physician immediately. Do NOT induce vomiting. Give nothing to eat or drink.

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

@1501.B015621 Frequently or prolonged contact with skin may cause dermal irritation.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Carbon dioxide (CO₂). Foam. Extinguishing powder. Dry extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Heating causes rise in pressure with risk of bursting. Combustible. Vapours may form explosive mixtures with air. Special exposure hazards arising from the substance itself, combustion products, resulting gases: Nitrogen oxides (NO_x). Carbon monoxide

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Explosion hazard.

6.3. Methods and material for containment and cleaning up

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Other information

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Treat the recovered material as prescribed in the section on waste disposal. Suitable material for taking up: diatomaceous earth.

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Information for safe handling: If handled uncovered, arrangements with local exhaust ventilation have to be used. The following must be prevented: inhalation. skin contact. Eye contact.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Vapours may form explosive mixtures with air.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. When using do not eat or drink. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Only use the material in places where open light, fire and other flammable sources can be kept away. Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Material, rich in oxygen, oxidizing. Materials to avoid: Acid. Base. Oxidizing agents. Paper.

Further information on storage conditions

Store only in original container. Protect against: heat. Heating causes rise in pressure with risk of bursting.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

| CAS No | Substance | ppm | mg/m ³ | fibres/ml | Category | Origin |
|-----------|-----------------------|-----|-------------------|-----------|---------------|--------|
| 78-83-1 | 2-Methylpropan-1-ol | 50 | 154 | | TWA (8 h) | WEL |
| | | 75 | 231 | | STEL (15 min) | WEL |
| 106-97-8 | Butane | 600 | 1450 | | TWA (8 h) | WEL |
| | | 750 | 1810 | | STEL (15 min) | WEL |
| 141-78-6 | Ethyl acetate | 200 | 734 | | TWA (8 h) | WEL |
| | | 400 | 1468 | | STEL (15 min) | WEL |
| 100-41-4 | Ethylbenzene | 100 | 441 | | TWA (8 h) | WEL |
| | | 125 | 552 | | STEL (15 min) | WEL |
| 1330-20-7 | Xylene: mixed isomers | 50 | 220 | | TWA (8 h) | WEL |
| | | 100 | 441 | | STEL (15 min) | WEL |

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Biological Monitoring Guidance Values (EH40)

| CAS No | Substance | Parameter | Value | Test material | Sampling time |
|-----------|-------------------------------------|-----------------------------------|--------------|---------------|---------------|
| 1330-20-7 | Xylene, o-, m-, p- or mixed isomers | methyl hippuric acid (creatinine) | 650 mmol/mol | urine | Post shift |

Additional advice on limit values

source:

8.2. Exposure controls**Appropriate engineering controls**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Refer to chapter 7. No further action is necessary.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Suitable eye protection: Goggles.

Hand protection

Tested protective gloves are to be worn:
Suitable material: NBR (Nitrile rubber), Butyl rubber.
Thickness of glove material: >0,4mm
penetration time (maximum wearing period): >480min
DIN-/EN-Norms EN ISO 374

Skin protection

Additional body protection measures: Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500. Do not eat, drink, smoke or sneeze at the workplace. Avoid contact with skin, eyes and clothes. Wash hands before breaks and after work. Set out skin protection guidelines.

Respiratory protection

Filtering device (full mask or mouthpiece) with filter:

Environmental exposure controls

Refer to chapter 7 No further action is necessary.

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

| | |
|------------------|----------------|
| Physical state: | Aerosol |
| Colour: | characteristic |
| Odour: | characteristic |
| Odour threshold: | not determined |

| | Test method |
|---|------------------------|
| Boiling point or initial boiling point and boiling range: | 4 °C |
| Lower explosion limits: | 1,7 vol. % |
| Upper explosion limits: | 10,9 vol. % |
| Flash point: | -38 °C DIN EN ISO 1523 |
| Auto-ignition temperature: | 273 °C DIN 51794 |
| Vapour pressure: (at 20 °C) | 3,2 hPa DIN EN 12 |
| Density: | 0,75 g/cm ³ |

9.2. Other information**Other safety characteristics**

| | |
|------------------|---|
| Solvent content: | VOCV (CH): 74,1 % VOC (EU): 677,27 g/l |
|------------------|---|

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Flow time:

34 (3 mm)

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

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

10.2. Chemical stability

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

10.3. Possibility of hazardous reactions

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard. Danger of bursting container.

10.5. Incompatible materials

Reacts with : Alkalis (alkalis). Oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapors.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

Propan LC50: 56 - 80 Vol.-% (Rat , 15 min.)

Dimethylether LC50: 308 mg/L (Rat)

| CAS No | Chemical name | | | | |
|-----------|----------------------------------|-------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 106-97-8 | butane | | | | |
| | inhalation (4 h) gas | LC50 658 ppm | Rat | GESTIS | |
| 1330-20-7 | xylene | | | | |
| | dermal | ATE 1100 mg/kg | | | |
| | inhalation vapour | ATE 11 mg/l | | | |
| | inhalation dust/mist | ATE 1,5 mg/l | | | |
| 100-41-4 | ethylbenzene | | | | |
| | oral | LD50 3500 mg/kg | Rat | GESTIS | |
| | dermal | LD50 15400 mg/kg | Rabbit | GESTIS | |
| | inhalation (4 h) vapour | LC50 17,2 mg/l | Rat | | |
| | inhalation dust/mist | ATE 1,5 mg/l | | | |
| 78-83-1 | 2-methylpropan-1-ol; iso-butanol | | | | |
| | oral | LD50 > 2830 mg/kg | Rat | | |
| | dermal | LD50 > 2000 mg/kg | Rat | | |
| | inhalation (4 h) vapour | LC50 > 24 mg/l | Rat | | |

Irritation and corrosivity

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STOT-repeated exposure

Can cause frostbite. Has de-greasing effect on the skin.

Specific effects in experiment on an animal

Toxicological data are not available.

Additional information on tests

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

SECTION 12: Ecological information**12.1. Toxicity**Aquatic toxicity
Harmful for Water fleas.

| CAS No | Chemical name | | | | | |
|----------|----------------------------------|-----------------|-----------|-------------------------|--------|--------|
| | Aquatic toxicity | Dose | [h] [d] | Species | Source | Method |
| 100-41-4 | ethylbenzene | | | | | |
| | Acute algae toxicity | ErC50 3,6 mg/l | 96 h | Algen | GESTIS | |
| 78-83-1 | 2-methylpropan-1-ol; iso-butanol | | | | | |
| | Acute fish toxicity | LC50 1430 mg/l | 96 h | Pimephales promelas | | |
| | Acute algae toxicity | ErC50 1250 mg/l | | Desmodesmus subspicatus | | |
| | Acute crustacea toxicity | EC50 1439 mg/l | 48 h | Daphnia magna | | |

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

Partition coefficient n-octanol/water

| CAS No | Chemical name | Log Pow |
|----------|----------------------------------|---------|
| 74-98-6 | propane | 2,36 |
| 106-97-8 | butane | 2,89 |
| 100-41-4 | ethylbenzene | 3,15 |
| 78-83-1 | 2-methylpropan-1-ol; iso-butanol | 0,79 |

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

No data available

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No data available

Further information

Do not allow to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC). Do not allow uncontrolled leakage of product into the environment.

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

Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - used product

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0
Transport category: 2
Tunnel restriction code: D

Other applicable information (land transport)

: 190 - 327 - 625
: 2
: D

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
Hazard label: 2.1



Classification code: 5F
Special Provisions: 190 327 344 625
Limited quantity: 1 L
Excepted quantity: E0

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Other applicable information (inland waterways transport)

: 190 327 625

Marine transport (IMDG)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1



Special Provisions: 63, 190, 277, 327, 344, 381, 959
Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U

Other applicable information (marine transport)

: 63, 190, 277, 327, 959

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS, FLAMMABLE
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1



Special Provisions: A145 A167 A802
Limited quantity Passenger: 30 kg G
Passenger LQ: Y203
Excepted quantity: E0
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

Other applicable information (air transport)

: A1

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

Restrictions on use (REACH, annex XVII):
Entry 3, Entry 28, Entry 40, Entry 75

2004/42/EC (VOC): VOCV (CH): 74,1 %
VOC (EU): 677,27 g/l

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 3 - highly hazardous to water

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15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information**Relevant H and EUH statements (number and full text)**

| | |
|--------|--|
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H229 | Pressurised container: May burst if heated. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)