

**Safety Data Sheet**

according to UK REACH Regulation

WS-Galvanal®

Revision date: 13.03.2025

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	
Contact person:	Abt. Produkt / Sicherheit	
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.

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P271 Use only outdoors or in a well-ventilated area.
P102 Keep out of reach of children.

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

Aerosole

Relevant ingredients

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

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:	3,2 hPa DIN EN 12
(at 20 °C)	
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)

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

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		

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Irritation and corrosivity

Frequently or prolonged contact with skin may cause dermal irritation.

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 fish toxicity	LC50	4,2 mg/l	96 h	Oncorhynchus mykiss	ECHA
	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

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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.

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



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

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

Directive 2004/42/EC on VOC in
paints and varnishes: VOCV (CH): 74,1 %
VOC (EU): 677,27 g/l

National regulatory information

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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

15.2. Chemical safety assessment

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

SECTION 16: Other information**Abbreviations and acronyms**

Flam. Gas: Flammable gases

Aerosol: Aerosols

Flam. Liq: Flammable liquids

Acute Tox: Acute toxicity

Asp. Tox: Aspiration hazard

Skin Irrit: Skin irritation

Eye Dam: Eye damage

Eye Irrit: Eye irritation

STOT SE: Specific target organ toxicity - single exposure

STOT RE: Specific target organ toxicity - repeated exposure

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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)