



Version number: GHS 1.0 Date of compilation: 2025-01-22

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

1.1 Product identifier

Trade name TECWERK MESSINGSPRAY Unique formula identifier (UFI) G360-30S7-G00C-T143

Article number 2000 354 068

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

Relevant identified uses General use

Paint, coating and lacquer

1.3 Details of the supplier of the safety data sheet

NORDWEST Handel AG Robert-Schuman-Str. 17 44263 Dortmund Germany

Telephone: +49 231 2222-3001 Telefax: +49 231 2222-3099 Website: www.nordwest.com e-mail (competent person)

sdb@nordwest.com

1.4 Emergency telephone number

Poison centre							
Country	Name	Postal code/city	Telephone				
Austria	Vergiftungsinformationszentrale (VIZ)		+43 (0)1 406 43 43				
Germany	Gemeinsamen Giftinformationszentrum (GGIZ) der Laender Mecklenburg-Vor- pommern, Sachsen, Sachsen-Anhalt und Thueringen c/o HELIOS Klinikum Erfurt	99089 Erfurt	+49-361-730730				
Luxembourg	Poison Centre Luxemburg		(+352) 8002 5500				
Switzerland	Tox Info Suisse		+145, 24h oder +41 44 251 51 51				

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Category	Hazard class and cat- egory	Hazard state- ment
2.3	aerosols	1	Aerosol 1	H222,H229
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.8D	specific target organ toxicity - single exposure (narcotic effects, drowsiness)	3	STOT SE 3	H336
4.1A	hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	hazardous to the aquatic environment - chronic hazard	2	Aquatic Chronic 2	H411

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)
Signal word danger

<u>Signal word</u> <u>Pictograms</u>

GHS02, GHS07, GHS09



Germany: en Page: 1 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

<u>Hazard statements</u> H222 H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

<u>Precautionary statements</u> P101 If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

P102 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source.

P211 P251 P271 Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area.

P280

Wear protective gloves/eye protection.

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P410+P412

Dispose of contents/container in accordance with local/regional/national/international regulations.

<u>Supplemental hazard information</u>
EUH066 Repeated exposure may cause skin dryness or cracking.

Hazardous ingredients for labelling acetone, ethyl acetate, Hydrocarbons, C9, aromatics

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of \geq 0,1%.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of \geq 0,1%.

SECTION 3: Composition/information on ingredients

3.1 **Substances**

Not relevant (mixture)

3.2 **Mixtures**

Description of the mixture

Identifier	Name of substance	Wt%	Classification acc. to GHS	Pictograms	Notes	Specific Conc. Limits
CAS No 106-97-8	butane	25 - < 50	Flam. Gas 1B / H221 Press. Gas C / H280		C GHS-HC	
EC No 203-448-7					U(b)	
Index No 601-004-00-0						
REACH Reg. No 01- 2119474691- 32-xxxx						
CAS No 74-98-6	propane	10-<25	Flam. Gas 1A / H220 Press. Gas L / H280		GHS-HC U(c)	
EC No 200-827-9				~ ~		
Index No 601-003-00-5						
REACH Reg. No 01- 2119486944- 21						
CAS No 67-64-1	acetone	10-<25	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	<u>(1)</u>	IOELV	
EC No 200-662-2			S101 SE 3 / H330			
Index No 606-001-00-8						
REACH Reg. No 01- 2119471330-						

Germany: en Page: 2 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Identifier	Name of substance	Wt%	Classification acc. to GHS	Pictograms	Notes	Specific Conc. Limits
49-xxxx						
CAS No 141-78-6	ethyl acetate	10 - < 25	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	<u>(*)</u>	GHS-HC IOELV	
EC No 205-500-4			3101323711330	•		
Index No 607-022-00-5						
REACH Reg. No 01- 2119475103- 46-xxxx						
CAS No 64742-95-6	Hydrocarbons, C9, aromatics	5 - < 10	Flam. Liq. 3 / H226 STOT SE 3 / H335 STOT SE 3 / H336	<u>(4)</u>	P(b)	
EC No 265-199-0			Asp. Tox. 1 / H304 Aquatic Acute 1 / H400			
Index No 649-356-00-4			Aquatic Chronic 2 / H411			
REACH Reg. No 01- 2119455851- 35-xxxx						
CAS No 7440-50-8	Copper	1-<5	Acute Tox. 4 / H302 Acute Tox. 3 / H331			
EC No 231-159-6			Eye Irrit. 2 / H319 Aquatic Acute 1 / H400	~ ~		
Index No 029-024-00-X			Aquatic Chronic 1 / H410			
REACH Reg. No 01- 2119480154- 42-xxxx						
CAS No 7440-66-6	zinc	<1	Aquatic Acute 1 / H400 Aquatic Chronic 1 /	£ 2	GHS-HC	
EC No 231-175-3			H410	~		
Index No 030-001-00-1						
REACH Reg. No 01- 2119467174- 37-xxxx						

<u>Notes</u>

Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

Harmonised classification (the classification of the substance corresponds to the entry in the list according to GHS-

1272/2008/EC, Annex VI) HC:

IOELV: Substance with a community indicative occupational exposure limit value

The classification as a carcinogen or mutagen is not required. The substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262- P301 + P310-P331 shall apply P(b):

U(b): The allocation to the group 'compressed gas' is based on the physical state in which the gas is packaged U(c): The allocation to the group 'liquefied gas' is based on the physical state in which the gas is packaged

Germany: en Page: 3 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Hazardous ingredients, Specific Conc. Limits, M-factors, ATE						
Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route		
Copper	-	M-factor (acute) = 10	500 ^{mg} / _{kg} 0.5 ^{mg} / _l /4h	oral inhalation: dust/mist		

Remarks

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Narcotic effects.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, BC-powder

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

Germany: en Page: 4 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Flammability hazards

Do not spray on an open flame or other ignition source. Protect from sunlight.

Packaging compatibilities

Keep only in original container.

Storage class (LGK) TRGS 510

LGK 2 B (aerosol dispensers or lighters)

Specific end use(s) 7.3

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 **Control parameters**

Occup	Occupational exposure limit values (Workplace Exposure Limits)										
Coun- try	Name of agent	CAS No	Iden- tifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Ceiling- C [ppm]	Ceiling- C [mg/m³]	Nota- tion	Source
DE	butane	106-97-8	AGW	1,000	2,400	4,000	9,600				TRGS 900
DE	ethyl acetate	141-78-6	MAK	200	750	400	1,500				DFG
DE	ethyl acetate	141-78-6	AGW	200	730	400	1,460			Υ	TRGS 900
DE	acetone	67-64-1	AGW	500	1,200	1,000	2,400			Υ	TRGS 900
DE	propane	74-98-6	AGW	1,000	1,800	4,000	7,200				TRGS 900
DE	copper	7440-50- 8	MAK		0.01		0.02			r	DFG
DE	zinc	7440-66- 6	MAK		2		4			i	DFG
DE	zinc	7440-66- 6	MAK		0.1		0.4			r	DFG
EU	ethyl acetate	141-78-6	IOEL V	200	734	400	1,468				2017/ 164/E U
EU	acetone	67-64-1	IOEL V	500	1,210						2000/ 39/EC

<u>Notation</u>

Ceiling-C ceiling value is a limit value above which exposure should not occur

inhalable fraction respirable fraction

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) STEL

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 TWA

hours time-weighted average (unless otherwise specified)

a risk of developmental toxicity does not need to be expected if the occupational exposure limit value and the bio-

logical limit value (BGW) are adhered to

Page: 5 / 14 Germany: en

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



2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Biological limit values										
Country Name of agent Parameter Notation Identifier Value Source										
DE	acetone	acetone		BAT	50 mg/l	DFG				
DE	acetone	acetone		BAT (BAR)	2.5 mg/l	DFG				
DE	DE acetone acetone BLV 50 mg/l TRGS 903									

Relevant DNELs of	components					
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
acetone	67-64-1	DNEL	1,210 mg/m³	human, inhalat- ory	worker (industry)	chronic - systemic effects
acetone	67-64-1	DNEL	2,420 mg/m³	human, inhalat- ory	worker (industry)	acute - local ef- fects
acetone	67-64-1	DNEL	186 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
ethyl acetate	141-78-6	DNEL	1,468 mg/m³	human, inhalat- ory	worker (industry)	acute - local ef- fects
ethyl acetate	141-78-6	DNEL	1,468 mg/m³	human, inhalat- ory	worker (industry)	acute - systemic effects
ethyl acetate	141-78-6	DNEL	734 mg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects
ethyl acetate	141-78-6	DNEL	63 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
ethyl acetate	141-78-6	DNEL	734 mg/m³	human, inhalat- ory	worker (industry)	chronic - systemic effects
Hydrocarbons, C9, aromatics	64742-95-6	DNEL	25 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
Hydrocarbons, C9, aromatics	64742-95-6	DNEL	150 mg/m³	human, inhalat- ory	worker (industry)	chronic - systemic effects
Copper	7440-50-8	DNEL	20 mg/m³	human, inhalat- ory	worker (industry)	acute - systemic effects
Copper	7440-50-8	DNEL	137 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
Copper	7440-50-8	DNEL	273 mg/kg bw/day	human, dermal	worker (industry)	acute - systemic effects
zinc	7440-66-6	DNEL	83 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
zinc	7440-66-6	DNEL	5 mg/m³	human, inhalat- ory	worker (industry)	chronic - systemic effects

Relevant PNECs of components								
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time		
acetone	67-64-1	PNEC	21 ^{mg} / _l	aquatic organ- isms	water	intermittent re- lease		
acetone	67-64-1	PNEC	10.6 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)		
acetone	67-64-1	PNEC	1.06 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)		
acetone	67-64-1	PNEC	100 ^{mg} / _I	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)		
acetone	67-64-1	PNEC	30.4 ^{mg} / _{kg}	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)		
acetone	67-64-1	PNEC	3.04 ^{mg} / _{kg}	aquatic organ-	marine sediment	short-term (single		

Page: 6 / 14 Germany: en



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Relevant PNECs of	components					
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
				isms		instance)
acetone	67-64-1	PNEC	29.5 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
ethyl acetate	141-78-6	PNEC	0.24 ^{mg} / _l	aquatic organ- isms	freshwater	short-term (single instance)
ethyl acetate	141-78-6	PNEC	0.024 ^{mg} / _l	aquatic organ- isms	marine water	short-term (single instance)
ethyl acetate	141-78-6	PNEC	650 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
ethyl acetate	141-78-6	PNEC	1.15 ^{mg} / _{kg}	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
ethyl acetate	141-78-6	PNEC	0.115 ^{mg} / kg	aquatic organ- isms	marine sediment	short-term (single instance)
ethyl acetate	141-78-6	PNEC	0.148 ^{mg} / kg	terrestrial organ- isms	soil	short-term (single instance)
ethyl acetate	141-78-6	PNEC	1.65 ^{mg} / _l	aquatic organ- isms	water	intermittent re- lease
Copper	7440-50-8	PNEC	7.8 ^{µg} / _I	aquatic organ- isms	freshwater	short-term (single instance)
Copper	7440-50-8	PNEC	5.2 ^{µg} / _l	aquatic organ- isms	marine water	short-term (single instance)
Copper	7440-50-8	PNEC	230 ^{µg} / _I	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
Copper	7440-50-8	PNEC	87 ^{mg} / _{kg}	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
Copper	7440-50-8	PNEC	676 ^{mg} / _{kg}	aquatic organ- isms	marine sediment	short-term (single instance)
Copper	7440-50-8	PNEC	65 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)
zinc	7440-66-6	PNEC	20.6 ^{µg} / _I	aquatic organ- isms	freshwater	short-term (single instance)
zinc	7440-66-6	PNEC	6.1 ^{µg} / _l	aquatic organ- isms	marine water	short-term (single instance)
zinc	7440-66-6	PNEC	100 ^{µg} / _I	aquatic organ- isms	sewage treatment plant (STP)	short-term (single instance)
zinc	7440-66-6	PNEC	117.8 ^{mg} / kg	aquatic organ- isms	freshwater sedi- ment	short-term (single instance)
zinc	7440-66-6	PNEC	56.5 ^{mg} / _{kg}	aquatic organ- isms	marine sediment	short-term (single instance)
zinc	7440-66-6	PNEC	35.6 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)







Personal protective equipment shall be used when the risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization.

Eye/face protection

Use protective eyewear to guard against splash of liquids.

Germany: en Page: 7 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Skin protection

Hand protection

Wear protective gloves. (Splash protection)

Type of material

NR: natural rubber, latex, FKM: fluoro-elastomer <u>Breakthrough times of the glove material</u>

>480 minutes (permeation: level 6)

Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Full face mask/half mask/quarter mask (EN 136/140).

Type: AX-P2 (gas filters and combined filters against low-boiling point organic compounds and particles, colour code: Brown/White)

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state aerosol (spray aerosol)

Colour aold

Odour characteristic Melting point/freezing point not determined Boiling point or initial boiling point and boiling range -161.5 °C at 1,013 hPa

Flammability flammable aerosol in accordance with GHS criteria

Lower and upper explosion limit 2.2 vol% - 15 vol% Flash point -88.6 °C at 1,013 hPa

Auto-ignition temperature 287 °C (auto-ignition temperature (liquids and gases))

Decomposition temperature not relevant pH (value) not determined Kinematic viscosity not relevant Solubility(ies) not determined

Partition coefficient

Partition coefficient n-octanol/water

(log value)

this information is not available

Vapour pressure 4,200 hPa at 20 °C

Density and/or relative density

Density 0.7317 g/ml (calculated value)

Relative vapour density information on this property is not available

9.2 Other information

Information with regard to physical there is no additional information

hazard classes

Other safety characteristics

Temperature class (EU, acc. to ATEX) T3 (maximum permissible surface temperature on the equipment: 200°C)

SECTION 10: Stability and reactivity

Reactivity 10.1

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

10.2 **Chemical stability**

See below "Conditions to avoid".

Possibility of hazardous reactions 10.3

No known hazardous reactions.

10.4 Conditions to avoid

Do not spray on an open flame or other ignition source. Keep away from heat.

Hints to prevent fire or explosion

Protect from sunlight.

10.5 **Incompatible materials**

Oxidisers

Page: 8 / 14 Germany: en



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Hazardous decomposition products 10.6

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4: May be harmful if inhaled.

Acute toxicity estimate (ATE) of components						
Name of substance	CAS No	Exposure route	ATE			
Copper	7440-50-8	oral	500 ^{mg} / _{kg}			
Copper	7440-50-8	inhalation: dust/mist	0.5 ^{mg} / _I /4h			

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation. Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Other information

Repeated exposure may cause skin dryness or cracking.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 **Toxicity**

Acc. to 1272/2008/EC: Very toxic to aquatic life with long lasting effects. Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV): WGK 2, obviously hazardous to water (Germany)

Aquatic toxicity (acute) of components Exposure time Name of substance **CAS No Endpoint Value Species** 49.9 mg/I butane 106-97-8 LC50 fish 96 h 19.37 ^{mg}/ı butane 106-97-8 EC50 96 h algae 8,120 mg/1 acetone 67-64-1 LC50 fish 96 h 230 ^{mg}/₁ 141-78-6 ethyl acetate LC50 fish 96 h ethyl acetate 220 mg/1 141-78-6 EC50 fish 96 h 0.42 mg/_I Hydrocarbons, C9, 64742-95-6 ErC50 algae 72 h aromatics Hydrocarbons, C9, 64742-95-6 EC50 0.29 mg/I 72 h algae aromatics 7440-50-8 LC50 193 ^{µg}/₁ fish 96 h Copper zinc 7440-66-6 LC50 $439 \, \mu g/I$ fish 96 h

Page: 9 / 14 Germany: en



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Aquatic toxicity (acute) of components									
Name of substance	Name of substance CAS No Endpoint Value Species Exposure time								
zinc 7440-66-6 EC50 1,833 ^{µg} / _I aquatic invertebrates 48 h									

Aquatic toxicity (chronic) of components						
Name of substance	CAS No	Endpoint	Value	Species	Exposure time	
acetone	67-64-1	EC50	61.15 ^g / _l	microorganisms	30 min	
ethyl acetate	141-78-6	EC50	2,306 ^{mg} / _l	aquatic invertebrates	24 h	
Hydrocarbons, C9, aromatics	64742-95-6	EC50	>99 ^{mg} / _l	microorganisms	10 min	

12.2 Persistence and degradability

Degradability o	Degradability of components						
Name of sub- stance	CAS No	Process	Degradation rate	Time	Method	Source	
acetone	67-64-1	carbon dioxide generation	90.9 %	28 d		ECHA	
ethyl acetate	141-78-6	oxygen deple- tion	62 %	5 d			
Hydrocarbons, C9, aromatics	64742-95-6	oxygen deple- tion	30.9 %	2 d		ECHA	

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components					
Name of substance	CAS No	BCF	Log KOW	BOD5/COD	
butane	106-97-8		1.09 (pH value: 7, 20 °C)		
propane	74-98-6		1.09 (pH value: 7, 20 °C)		
acetone	67-64-1		-0.23	963.5	
ethyl acetate	141-78-6	30	0.68 (pH value: 7, 25 °C)		

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0.1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0.1\%$.

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes, (Recommendations)

Product

08 01 11* Waste paint and varnish containing organic solvents or other hazardous substances

Product residues

16 05 04* Gases in pressure containers (including halons) containing hazardous substances

Germany: en Page: 10 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Packagings

15 01 04 Metallic packaging

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN UN 1950
IMDG-Code UN 1950
ICAO-TI UN 1950

14.2 UN proper shipping name

ADR/RID/ADN AEROSOLS IMDG-Code AEROSOLS

ICAO-TI Aerosols, flammable

14.3 Transport hazard class(es)

 ADR/RID/ADN
 2 (2.1)

 IMDG-Code
 2.1

 ICAO-TI
 2.1

14.4 Packing group not assigned

14.5 Environmental hazards hazardous to the aquatic environment

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) Additional information

Classification code 5F Danger label(s) 2.1



Environmental hazards yes (hazardous to the aquatic environment)

Special provisions (SP) 190, 327, 344, 625

Excepted quantities (EQ) E0
Limited quantities (LQ) 1 L
Transport category (TC) 2
Tunnel restriction code (TRC) D

International Maritime Dangerous Goods Code (IMDG) <u>Additional information</u>

Marine pollutant yes (hazardous to the aquatic environment)

Danger label(s) 2.1



Special provisions (SP) 63, 190, 277, 327, 344, 381, 959

Excepted quantities (EQ) E0
Limited quantities (LQ) 1 L
EmS F-D, S-U

Stowage category -

International Civil Aviation Organization (ICAO-IATA/DGR) <u>Additional information</u>

Environmental hazards yes (hazardous to the aquatic environment)

Danger label(s) 2.1



Special provisions (SP) A145, A167
Excepted quantities (EQ) E0
Limited quantities (LQ) 30 kg

Germany: en Page: 11 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

none of the ingredients are listed

Deco-Paint Directive (2004/42/EC)

VOC content	630.1 ^g / _i
-------------	-----------------------------------

Maximum VOC content limit					
Product category	Product subcategory	Coating	Туре	VOC g/l	
vehicle refinishing products	special finishes	all types		840	

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) none of the ingredients are listed

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Pollutant release and transfer registers (PRTR)				
Name of substance	CAS No	Remarks	Threshold for releases to air (kg/year)	
zinc	7440-66-6	(8)	200	
Copper	7440-50-8	(8)	100	

Legend

(8) All metals shall be reported as the total mass of the element in all chemical forms present in the release

Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	CAS No	Listed in	Remarks	
zinc		a)		
Copper		a)		

Legend

a) Indicative list of the main pollutants

Regulation on the marketing and use of explosives precursors

This product is regulated by Regulation (EU) No 2019/1148: All suspicious transactions as well as the loss and theft of significant quantities must be reported to the competent authority.

Explosives precursors which are subject to restrictions						
Name of substance	CAS No	Type of registration	Remarks	Limit value	Upper limit value for the purpose of licensing under Art- icle 5(3)	
acetone	67-64-1	Annex II				

Legend

Annex II Substances on their own or in mixtures or in substances for which suspicious transactions shall be reported

Regulation on persistent organic pollutants (POP)

none of the ingredients are listed

National regulations (Germany)

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

<u>Wassergefährdungsklasse, WGK (water hazard class)</u> 2 obviously hazardous to water

Germany: en Page: 12 / 14



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass concentra- tion	Notation
5.2.5	organic substances		≥ 25 wt%	0.5 ^{kg} / _h	50 ^{mg} / _{m³}	3)

Notation

a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

National inventories

Country	Inventory	Status
EU	REACH Reg.	not all ingredients are listed

Legend

REACH Reg. REACH registered substances

15.2 **Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

Abbr

Descriptions of used abbreviations.

Commission Directive establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC. Commission Directive establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU. Acute toxicity.

Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).

Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road).

Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN).

Workplace exposure limit.

Hazardous to the aquatic environment - acute hazard.

Hazardous to the aquatic environment - chronic hazard.

Aspiration hazard.

Acute Toxicity Estimate.

Bioconcentration factor.

Biochemical Oxygen Demand.

Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).

Ceiling value. 2000/39/EC. 2017/164/EU.

Acute Tox.

ADR.

ADR/RID/ADN.

ADR/RID/ADN.
AGW.
Aquatic Acute.
Aquatic Chronic.
Asp. Tox.
ATE.
BCF.
BOD.
CAS.
Celling-C.
CLP.
COD.
DFG.

DNEL EC50.

Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).

Ceiling value.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Chemical oxygen demand.

Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim.

Dangerous Goods Regulations (see IATA/DGR).

Derived No-Effect Level.

Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval.

The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union).

Endocrine disruptor.

European Inventory of Existing Commercial Chemical Substances.

European List of Notified Chemical Substances.

European List of Notified Chemical Substances. EC No.

ED. EINECS. ELINCS.

Emergency Schedule.

EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) re-EmS. ErC50.

ECSD: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC5U) or lative to the control.

Seriously damaging to the eye.

Irritant to the eye.

Flammable gas.

Flammable liquid.

"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations.

International Air Transport Association.

Dangerous Goods Regulations (DGR) for the air transport (IATA).

International Civil Aviation Organization.

Technical instructions for the safe transport of dangerous goods by air.

International Maritime Dangerous Goods Code.

International country is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008.

Indicative occupational exposure limit value.

Eye Dam. Eye Irrit. Flam. Gas. Flam. Liq.

Ham. Liq. GHS. IATA. IATA/DGR. ICAO. ICAO-TI. IMDG. IMDG-Code. Index No.

Index No. IOELV.

Indicative occupational exposure limit value.

Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time inter-LC50.

LGK. Log KOW. M-Factor.

Lethal Concentration 50%: the LCSD corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval.

Lagerklasse (storage class according to TRGS 510, Germany).

n-Octanol/water.

Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present.

No-Longer Polymer.

Persistent, Bioaccumulative and Toxic.

Predicted No-Effect Concentration.

Parts per million.

Gas under pressure.

Registration, Evaluation, Authorisation and Restriction of Chemicals.

Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail).

Short-term exposure limit.

Specific target organ toxicity - single exposure.

Substance of Very High Concern.

Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany).

Arbeitsplatzgrenzwerte (TRGS 900).

Biologische Grenzwerte (TRGS 903).

Time-weighted average.

Volatile Organic Compounds.

Very Persistent and very Bioaccumulative.

NLP.

PBT. PNEC.

. Gas.

Ppm. Press. G REACH. RID.

STEL. STOT SE.

STOT SE. SVHC. TRGS. TRGS 900. TRGS 903. TWA.

VOC. VPvB.

Page: 13 / 14 Germany: en



according to Regulation (EC) No. 1907/2006 (REACH)

2000 354 068 - TECWERK MESSINGSPRAY

Version number: GHS 1.0 Date of compilation: 2025-01-22

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.
Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture. Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

H220.	Extremely flammable gas.
H221.	Flammable gas.
H222.	Extremely flammable aerosol.
H225.	Highly flámmable liguid and vapour.
H226.	Flammable liquid and vapour.
H229.	Pressurised container: May burst if heated.
H280.	Contains gas under pressure; may explode if heated.
H302.	Harmful if swallowed.
H304.	May be fatal if swallowed and enters airways.
H319.	Caúses serious eye irritation.
H331.	Toxic if inhaled.
H335.	May cause respiratory irritation.
H336.	May cause drowsiness or dizziness.
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.

Disclaimer

This SDS has been compiled and is solely intended for this product. This information is based on the present state of our knowledge and does not constitute an assurance of product properties nor establishes contract legal rights. All data about health and safety are only for information. They should therefore not be construed as specifications.

Germany: en Page: 14 / 14