

Page 1 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

(GB)

CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

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

Corrosion protection Uses advised against: No information available at present.

1.3 Details of the supplier of the safety data sheet

Theo Förch GmbH & Co. KG Theo-Förch-Str. 11 – 15 74196 Neuenstadt Tel.: 07139/95-0 Fax: 07139/95-199 Email: info@foerch.de Homepage: www.foerch.com

Details of the supplier of the safety data sheet see section 16 of this safety data sheet.

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number Emergency information services / official advisory body:

Telephone number of the company in case of emergencies: +49 (0) 700 / 24 112 112 (TFC)

SECTION 2: Hazards identification

	2.1 Classification of the substance or mixture Classification according to Regulation (EC) 1272/2008 (CLP)							
Hazard class Hazard category Hazard statement								
Skin Irrit.	2	H315-Causes skin irritation.						
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.						
Aquatic Acute	1	H400-Very toxic to aquatic life.						
Aerosol	1	H222-Extremely flammable aerosol.						
Aquatic Chronic	1	H410-Very toxic to aquatic life with long lasting effects.						
Aerosol	1	H229-Pressurised container: May burst if heated.						

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)



Page 2 of 20

(GB)

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200



H315-Causes skin irritation. H222-Extremely flammable aerosol. H410-Very toxic to aquatic life with long lasting effects. H229-Pressurised container: May burst if heated.

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. P273-Avoid release to the environment. P280-Wear protective gloves. P332+P313-If skin irritation occurs: Get medical advice / attention.

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

Without adequate ventilation, formation of explosive mixtures may be possible. Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any substance with endocrine disrupting properties (< 0.1 %).

In case of spreading near the ground, flashback to distance sources of ignition is possible.

SECTION 3: Composition/information on ingredients

Aerosol 3.1 Substances

n.a. 3.2 Mixtures

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Registration number (REACH)	01-2119475514-35-XXXX
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	921-024-6
CAS	
content %	10-<20
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Flam. Liq. 2, H225
	Skin Irrit. 2, H315
	STOT SE 3, H336
	Asp. Tox. 1, H304
	Aquatic Chronic 2, H411

Copper flakes (coated with aliphatic acid)	
Registration number (REACH)	
Index	029-019-01-X
EINECS, ELINCS, NLP, REACH-IT List-No.	(231-159-6)
CAS	(7440-50-8)
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	Acute Tox. 3, H331
	Acute Tox. 4, H302
	Eye Irrit. 2, H319
	Aquatic Acute 1, H400 (M=10)
	Aquatic Chronic 1, H410 (M=10)



Page 3 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Specific Concentration Limits and ATE

(GB)

ATE (oral): 500 mg/kg ATE (as inhalation, Dusts or mist): 0,733 mg/l/4h

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP, REACH-IT List-No.	918-481-9
CAS	(64742-48-9)
content %	<2,5
Classification according to Regulation (EC) 1272/2008 (CLP), M-factors	EUH066
	Asp. Tox. 1, H304

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here. Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

Inhalation

Remove person from danger area.

Supply person with fresh air and consult doctor according to symptoms.

Skin contact

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult doctor.

Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion

Consult doctor immediately - keep Data Sheet available.

Do not induce vomiting.

Danger of aspiration.

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. The following may occur: Irritation of the eyes Product removes fat. Dermatitis (skin inflammation) Headaches Dizziness Fatigue Ingestion: Danger of aspiration. Oedema of the lungs Lung damage

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

4.3 Indication of any immediate medical attention and special treatment needed Indications for the physician:

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water jet spray/foam/CO2/dry extinguisher



Page 4 of 20

(GB)

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Unsuitable extinguishing media

High volume water jet

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Hydrocarbons Copper oxides Toxic pyrolysis products. Explosive vapour/air or gas/air mixtures. Danger of bursting (explosion) when heated

5.3 Advice for firefighters

For personal protective equipment see Section 8. Protective respirator with independent air supply.

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

In case of fire and/or explosion do not breathe fumes.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination. Ensure sufficient ventilation, remove sources of ignition.

Avoid dust formation with solid or powder products.

Leave the danger zone if possible, use existing emergency plans if necessary.

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

Do not carry cleaning cloths soaked in product in trouser pockets.

6.1.2 For emergency responders

See section 8 for suitable protective equipment and material specifications.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent from entering drainage system.

Prevent surface and ground-water infiltration, as well as ground penetration.

If accidental entry into drainage system occurs, inform responsible authorities.

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

6.3 Methods and material for containment and cleaning up

If spray or gas escapes, ensure ample fresh air is available.

Active substance:

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

6.4 Reference to other sections

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling

7.1.1 General recommendations

Ensure good ventilation.

Keep away from sources of ignition - Do not smoke. Do not use on hot surfaces.

Take precautions against electrostatic charges.

Observe directions on label and instructions for use.

Use working methods according to operating instructions.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.



Page 5 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Keep away from food, drink and animal feedingstuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Store product closed and only in original packing.

Not to be stored in gangways or stair wells. Observe special regulations for aerosols!

Observe special storage conditions.

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well ventilated place.

(GB)

Observe special storage conditions.

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 600 mg/m3

Chemical Name	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics	, <5% n-hexane		
WEL-TWA: 600 mg/m3	WEL-STEL:			
Monitoring procedures:	- Compur - KITA-187 S (551 174)			
BMGV:		Other information: (OEL acc. to RCP-method, paragraphs 84-87, EH40)		
Chemical Name	Copper flakes (coated with aliphatic acid)			
WEL-TWA: 1 mg/m3 (dusts and m		nd mists, as Cu)		
Monitoring procedures:	ISO 15202 (Workplace air - Determination of metals and metalloids in airborne particulate matter by Inductively Coupled Plasma Atomic Emission Spectrometry), Part 1-3 - 2012(Part 1), 2012(Part 2), 2004 (Part 3) - EU project BC/CEN/ENTR/000/2002- - 16 card 84-1 (2004) MDHS 91/2 (Metals and metalloids in workplace air by X-ray fluorescence - spectrometry) - 2015 - EU project BC/CEN/ENTR/000/2002-16 card 84-2 (2004) - NIOSH 7029 (Copper (dust and fume)) - 1994 - NIOSH 7300 (ELEMENTS by ICP (Nitric/Perchloric Acid Ashing)) - 2003 - NIOSH 7301 (Elements by ICP (aqua regia ashing)) - 2003 - NIOSH 7303 (Elements by ICP (Hot block HCl/HNO3 digestion)) - 2003 - OSHA ID-121 (Metal and metalloid particulates in workplace atmospheres (Atomic - absorption)) - 2002 - EU project BC/CEN/ENTR/000/2002-16 card 84-10 (2004) OSHA ID-125G (Metal and metalloid particulates in workplace atmospheres (ICP)) - 2002 OSHA ID-206 (ICP analysis of metal/metallloid particulates from solder operations) - - 1991			
BMGV:		Other information:		
Chemical Name	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cycli	cs. <2% aromatics		
WEL-TWA: 800 mg/m3	WEL-STEL:			
Monitoring procedures:	 Draeger - Hydrocarbons 0,1%/c (8⁻ Draeger - Hydrocarbons 2/a (81 03 Compur - KITA-187 S (551 174) 	581)		
BMGV:		Other information: (OEL acc. to RCP-method, paragraphs 84-87, EH40)		
Chemical Name	Butane			
WEL-TWA: 600 ppm (1450 mg/m3	i) WEL-STEL: 750 ppm (1810 m	g/m3)		
Monitoring procedures:	- Compur - KITA-221 SA (549 459) - OSHA PV2010 (n-Butane) - 1993			
BMGV:		Other information:		
Chemical Name	Propane			
WEL-TWA: 1000 ppm (ACGIH)	WEL-STEL:			
Monitoring procedures:	- Compur - KITA-125 SA (549 954) - OSHA PV2077 (Propane) - 1990			
BMGV:		Other information:		



œ Page 6 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Chemic	cal Name	
	1000	(10

Chemical Name Isc	butane			
WEL-TWA: 1000 ppm (EX) (ACGIH)		WEL-STEL:		
Monitoring procedures:	-	Compur - KITA-113 SB(C) (549 368)	
BMGV:			Other information:	

Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - dermal	Long term, systemic effects	DNEL	699	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	608	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	699	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	773	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2035	mg/m3	

Copper flakes (coated wi	th aliphatic acid)					
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	7,8	µg/l	
	Environment - marine		PNEC	5,2	µg/l	
	Environment - sewage treatment plant		PNEC	230	µg/l	
	Environment - sediment, freshwater		PNEC	87	mg/kg dw	
	Environment - sediment, marine		PNEC	676	mg/kg dw	
	Environment - soil		PNEC	65	mg/kg dw	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	18,2	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	137	mg/kg bw/day	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	273	mg/kg bw/day	

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics							
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note	
Consumer	Human - oral	Long term, systemic effects	DNEL	300	mg/kg		
Consumer	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg		
Consumer	Human - inhalation	Long term, systemic effects	DNEL	900	mg/m3		
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg		

Propene						
Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
	Environment - freshwater		PNEC	1,38	mg/l	
	Environment - marine		PNEC	1,38	mg/l	
·						



Page 7 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

(GB)

Workers / employees	Human - inhalation	Short term, local effects	DNEL	860	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	860	mg/m3	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

(8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

(13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE), (14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

8.2 Exposure controls 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection: Tight fitting protective goggles (EN 166) with side protection, with danger of splashes.

Skin protection - Hand protection: Recommended Protective nitrile gloves (EN ISO 374). Minimum layer thickness in mm: 0,5 Permeation time (penetration time) in minutes: >= 480 Protective hand cream recommended. The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments). Respiratory protection: If OES or MEL is exceeded.

If OES or MEL is exceeded. Filter AX P3 EN 14387 Or: Filter A P3 (EN 14387), code colour brown, white Observe wearing time limitations for respiratory protection equipment.

Thermal hazards: If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Additional information on hand protection - No tests have been performed. In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.



Page 8 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account. Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use. The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

8.2.3 Environmental exposure controls

No information available at present.

(GB)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state: Colour: Odour: Melting point/freezing point: Boiling point or initial boiling point and boiling range: Flammability: Lower explosion limit: Upper explosion limit: Flash point:

Auto-ignition temperature: Decomposition temperature: pH: Kinematic viscosity: Solubility: Partition coefficient n-octanol/water (log value): Vapour pressure: Density and/or relative density: Relative vapour density: Particle characteristics: 9.2 Other information

Explosives: Oxidising liquids: Solvents content:

Aerosol. Active substance: liquid. Copper Slightly There is no information available on this parameter. There is no information available on this parameter. Yes 0,8 Vol-% 11 Vol-% -97 °C (The flash-point of the mixture was not tested, but complies with the ingredient with the lowest value.) Does not apply to aerosols. There is no information available on this parameter. Mixture is non-soluble (in water). <=20,5 mm2/s (40°C) Insoluble Does not apply to mixtures. 3 - 5 bar (20°C) 0,66 g/ml Does not apply to aerosols. Does not apply to aerosols.

Possible build up of explosive/highly flammable vapour/air mixture. There is no information available on this parameter. 19 %

SECTION 10: Stability and reactivity

10.1 Reactivity

Formation of highly flammable vapour/air mixtures possible. Danger of bursting (explosion) when heated

10.2 Chemical stability

Stable with proper storage and handling. 10.3 Possibility of hazardous reactions

None known No decomposition when used as directed.

10.4 Conditions to avoid

Heating, open flame, ignition sources Pressure increase will result in danger of bursting. Electrostatic charge

10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

No decomposition when used as directed.

SECTION 11: Toxicological information

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

Possibly more information on health effects, see Section 2.1 (classification).



Safety data sheet according to Revision date / version: 21.09.20	22 / 0019					
Replacing version dated / version	า: 01.11.2021	/ 0018				
Valid from: 21.09.2022						
PDF print date: 23.09.2022 CU Welding Spray						
400 ml Art.: 6200 2200, Art.: 6204	4 2200					
,						
CU Welding Spray 400 ml Art.: 6200 2200, Art.: 620	04 2200					
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg	Organisin	Test method	calculated value
Acute toxicity, by dermal route:	,	2000	mg/kg			n.d.a.
Acute toxicity, by inhalation:	ATE	>20	mg/l/4h			calculated value
Acute toxicity, by inhalation:	ATE	>5	mg/l/4h			calculated value
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation: Respiratory or skin						n.d.a. n.d.a.
sensitisation:						11.u.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity -						n.d.a.
single exposure (STOT-SE): Specific target organ toxicity -						nda
repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.
• •					<u> </u>	
Hydrocarbons, C6-C7, n-alkane				1		
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
Acute toxicity, by definial route.	LDOO	- 2000	mg/kg	T Cat	Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>20	mg/l/4h	Rat	OECD 403 (Acute	
					Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute	Skin Irrit. 2
					Dermal	
Serious eye damage/irritation:				Rabbit	Irritation/Corrosion) OECD 405 (Acute Eye	Mild irritant
Senous eye damage/imation.				Rabbit	Irritation/Corrosion)	(Analogous
						conclusion)
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact
sensitisation:					Sensitisation)	
Carcinogenicity:						Negative
Reproductive toxicity:					OECD 414 (Prenatal Developmental Toxicity	Analogous conclusion,
					Study)	Negative
Specific target organ toxicity -	1					STOT SE 3,
single exposure (STOT-SE):						H336
Specific target organ toxicity -						Negative
repeated exposure (STOT-RE):						Vaa
Aspiration hazard: Symptoms:						Yes drowsiness,
oyniptoma.						unconsciousnes
						, boort/size-late-
						heart/circulatory disorders,
						headaches,
						cramps,
						drowsiness,
						mucous
						membrane
						irritation,
						dizziness, nausea and
						vomiting.
Specific target organ toxicity -	1					Not irritant
single exposure (STOT-SE),						(respiratory tract
inhalative:						



B Page 10 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Acute toxicity, by oral route:	ATE	500	mg/kg	
Acute toxicity, by inhalation:	ATE	0,733	mg/l/4h	Dusts or mist

Hydrocarbons, C10-C13, n-alka Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	
					Toxicity)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
					Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>5000	mg/m3/8h	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours
Acute toxicity, by inhalation:	LC50	>5	mg/m3/4h	Rat	OECD 403 (Acute	Vapours,
					Inhalation Toxicity)	Analogous
Okin compaign/insitation:						conclusion
Skin corrosion/irritation:						Repeated
						exposure may cause skin
						dryness or
						cracking.,
						Product removes
						fat.
Skin corrosion/irritation:					OECD 404 (Acute	Not irritant,
					Dermal	Analogous
• • • • • •					Irritation/Corrosion)	conclusion
Serious eye damage/irritation:					OECD 405 (Acute Eye	Not irritant
Despiratory or akin				Cuinco nia	Irritation/Corrosion)	No (akin contact)
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
Contrologi matagemoity.				typhimurium	Reverse Mutation Test)	Negative
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian	Negative,
					Erythrocyte	Analogous
					Micronucleus Test)	conclusion
Carcinogenicity:					OECD 453 (Combined	Negative,
					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
Reproductive toxicity:					Studies) OECD 421	Negative,
Reproductive toxicity.					(Reproduction/Developm	Analogous
					ental Toxicity Screening	conclusion
					Test)	001101001011
Reproductive toxicity:	NOAEC	>= 5220	mg/m3	Rat	OECD 414 (Prenatal	Negative,
					Developmental Toxicity	Analogous
					Study)	conclusioninhala
• • • • • • • •						ion
Specific target organ toxicity -					OECD 408 (Repeated	No indications of
repeated exposure (STOT-RE):					Dose 90-Day Oral Toxicity Study in	such an effect., Analogous
					Rodents)	conclusion
Aspiration hazard:						Yes
Symptoms:						unconsciousnes
						, headaches,
						dizziness,
						Dermatitis (skin
						inflammation),
						Reddening,
						drying of the
						skin., mucous membrane
						irritation, nausea
						and vomiting.,
						diarrhoea, lower
						abdominal pain
			·		·	·
Butane						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes



B Page 11 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Germ cell mutagenicity:				Salmonella	OECD 471 (Bacterial	Negative
				typhimurium	Reverse Mutation Test)	
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative
					Mammalian	
					Chromosome	
					Aberration Test)	
Germ cell mutagenicity:				Human being	OECD 473 (In Vitro	Negative
					Mammalian	-
					Chromosome	
					Aberration Test)	
Germ cell mutagenicity:				Rat	OECD 474 (Mammalian	Negative
					Erythrocyte	-
					Micronucleus Test)	
Aspiration hazard:						No
Specific target organ toxicity -	NOAEC	21,394	mg/l	Rat	OECD 422 (Combined	
repeated exposure (STOT-RE),					Repeated Dose Tox.	
inhalat.:					Study with the	
					Reproduction/Developm.	
					Tox. Screening Test)	
Symptoms:						ataxia, breathing
						difficulties,
						drowsiness,
						unconsciousnes
						, frostbite,
						disturbed heart
						rhythm,
						headaches,
						cramps,
						intoxication,
						dizziness,
						nausea and
						vomiting.

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Acute toxicity, by inhalation:	LC50	260000	ppmV/4h	Rat		Gasses, Male, Analogous conclusion
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Not irritant
Germ cell mutagenicity:					OECD 473 (In Vitro Mammalian Chromosome Aberration Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEC	21,641	mg/l		OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	
Aspiration hazard:						No
Symptoms:						breathing difficulties, unconsciousnes , frostbite, headaches, cramps, mucous membrane irritation, dizziness, nausea and vomiting.



Page 12 of 20
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019
Replacing version dated / version: 01.11.2021 / 0018
Valid from: 21.09.2022
PDF print date: 23.09.2022
CU Welding Spray
400 ml Art.: 6200 2200, Art.: 6204 2200

Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	7,214	mg/l	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	LOAEL	21,641	mg/l	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)

Isobutane						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Acute toxicity, by inhalation:	LC50	260000	ppmV/4h	Rat		Gasses, Male
Serious eye damage/irritation:				Rabbit		Not irritant
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Aspiration hazard:						No
Symptoms:						unconsciousness , frostbite, headaches, cramps, dizziness, nausea and vomiting.
Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:	NOAEL	21,394	mg/l	Rat	OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Developm. Tox. Screening Test)	

11.2. Information on other hazards

CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200										
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes				
Endocrine disrupting properties:	-			-		Does not apply				
						to mixtures.				
Other information:						No other				
						relevant				
						information				
						available on				
						adverse effects				
						on health.				

SECTION 12: Ecological information

CU Welding Spray									
400 ml Art.: 6200 2200, Art.: 6204 2200									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
12.1. Toxicity to fish:	-						n.d.a.		
12.1. Toxicity to daphnia:							n.d.a.		
12.1. Toxicity to algae:							n.d.a.		
12.2. Persistence and							n.d.a.		
degradability:									
12.3. Bioaccumulative							n.d.a.		
potential:									
12.4. Mobility in soil:							n.d.a.		
12.5. Results of PBT							n.d.a.		
and vPvB assessment									
12.6. Endocrine							Does not apply		
disrupting properties:							to mixtures.		



Page 13 of 20
Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019
Replacing version dated / version: 01.11.2021 / 0018
Valid from: 21.09.2022
PDF print date: 23.09.2022
CU Welding Spray
400 ml Art.: 6200 2200, Art.: 6204 2200

12.1. Toxicity to fish:

12.1. Toxicity to daphnia: 12.1. Toxicity to daphnia: LC50

EC50

NOEC/NOEL

24h

48h

12.7. Other adverse effects:				No information available on
ellecis.				
				other adverse
				effects on the
				environment.
Other information:	AOX	0	%	Does not contain
				any organically
				bound halogens
				which can
				contribute to the
				AOX value in
				waste water.
Other information:				DOC-elimination
				degree(complexi
				ng organic
				substance)>=
				80%/28d: n.a.

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative potential:	·						Concentration in organisms possible.
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,17	mg/l	Daphnia magna		
12.1. Toxicity to daphnia:	LOEC/LOEL	21d	0,32	mg/l	Daphnia magna		
12.2. Persistence and degradability:		28d	98	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	
12.1. Toxicity to fish:	NOEC/NOEL	28d	2,045	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	NOELR	28d	2,04	mg/l	Salmo gairdneri		
12.1. Toxicity to fish:	LC50	96h	11,4	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LL50	96h	11,4	mg/l	Salmo gairdneri	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	3	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	48h	2,1	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	30	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	81	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable, Analogous conclusion
12.3. Bioaccumulative potential:	BCF		242-253				
12.4. Mobility in soil:							Adsorption in ground., Product is slightly volatile
Other information:	AOX		0	%			
	ith alimbatic!-	N					
Copper flakes (coated w			Malua	L lusit	Ormaniam	Test method	Natas
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes

0,0068-

0,0156

0,004

0,03

mg/l

mg/l

mg/l

Pimephales

Daphnia magna

Daphnia magna

promelas



Page 14 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

12.1. Toxicity to algae:	EC50	72h	0.0426-	ma/l	Pseudokirchneriell	
12.1. TONICITY TO AIGAC.	LC30	1211	0,0420-	ing/i	1 Seudokirchinenen	
			0.0535		a subcapitata	
			0,0555		a subcapitata	

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	0,10	mg/l	Oncorhynchus mykiss	QSÁR	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,18	mg/l	Daphnia magna	QSÁR	
12.1. Toxicity to algae:	ErL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOELR	72h	1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	80	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.3. Bioaccumulative potential:	Log Pow		5,5-7,2				
12.4. Mobility in soil:	Log Koc		>3				
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
12.7. Other adverse effects:							Product floats of the water surface.
Water solubility:			~10	mg/l			Slight

Butane Test method Toxicity / effect Endpoint Time Value Unit Organism Notes 12.1. Toxicity to fish: LC50 96h 24,11 QSAR mg/l QSAR 12.1. Toxicity to daphnia: LC50 48h 14,22 mg/l 12.3. Bioaccumulative Log Pow 2,98 A notable biological potential: accumulation potential is not to be expected (LogPow 1-3). 12.4. Mobility in soil: Not to be expected 12.5. Results of PBT No PBT and vPvB assessment substance, No vPvB substance

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative potential:	Log Pow		2,28				A notable biological accumulation
							potential is not to be expected (LogPow 1-3).
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

@B-



Page 15 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Iso	butane

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative							A notable
potential:							biological
							accumulation
							potential is not to
							be expected
							(LogPow 1-3).
12.1. Toxicity to fish:	LC50	96h	27,98	mg/l			
12.1. Toxicity to algae:	EC50	96h	7,71	mg/l			
12.2. Persistence and							Readily
degradability:							biodegradable
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance

SECTION 13: Disposal considerations

13.1 Waste treatment methods For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU) 16 05 04 gases in pressure containers (including halons) containing hazardous substances Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations. E.g. suitable incineration plant. Implement substance recycling.

For contaminated packing material

Pay attention to local and national official regulations. Recommendation: Do not perforate, cut up or weld uncleaned container. Residues may present a risk of explosion.

Return to manufacturer with residual pressure.

SECTION 14: Transport information			
General statements			
14.1. UN number or ID number:	1950		
Transport by road/by rail (ADR/RID)			
14.2. UN proper shipping name:			
UN 1950 AEROSOLS			
14.3. Transport hazard class(es):	2.1		
14.4. Packing group:			
Classification code: LO:	5F		
14.5. Environmental hazards:	environmentally hazardous		
Tunnel restriction code:	D		
Transport by sea (IMDG-code)	-		
14.2. UN proper shipping name:			
AEROSOLS			
14.3. Transport hazard class(es):	2.1		
14.4. Packing group:	-		
EmS:	F-D, S-U		
Marine Pollutant:	Yes		
14.5. Environmental hazards:	environmentally hazardous		
Transport by air (IATA)			
14.2. UN proper shipping name:			
Aerosols, flammable			
14.3. Transport hazard class(es):	2.1		



Page 16 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

14.4. Packing group:14.5. Environmental hazards:

(GB)

Not applicable

14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

14.7. Maritime transport in bulk according to IMO instruments

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Observe restrictions:

Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)! Regulation (EC) No 1907/2006, Annex XVII

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
E1		100	200
P3a	11.1	150 (netto)	500 (netto)

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 2 - This product contains the substances listed below:

	e_{30} m), Annex I, I att $z = 1$ ma	s product contains the substai		
Entry Nr	Dangerous substances	Notes to Annex I	Qualifying quantity	Qualifying quantity
			(tonnes) for the	(tonnes) for the
			application of - Lower-tier	application of - Upper-tier
			requirements	requirements
18	Liquefied flammable	19	50	200
	gases, Category 1 or 2			
	(including LPG) and			
	natural gas			

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC):

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

2

Revised sections:

These details refer to the product as it is delivered. Employee instruction/training in handling hazardous materials is required.

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):

Classification in accordance with regulation	Evaluation method used		
(EC) No. 1272/2008 (CLP)			
Skin Irrit. 2, H315	Classification according to calculation procedure.		
Asp. Tox. 1, H304	Classification according to calculation procedure.		
Aquatic Acute 1, H400	Classification according to calculation procedure.		

84,9 %



Page 17 of 20

(GB)

Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Aerosol 1, H222	Classification according to calculation procedure.
Aquatic Chronic 1, H410	Classification according to calculation procedure.
Aerosol 1, H229	Classification based on the form or physical state.

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H225 Highly flammable liquid and vapour. H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

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.

EUH066 Repeated exposure may cause skin dryness or cracking.

Skin Irrit. — Skin irritation Asp. Tox. — Aspiration hazard Aquatic Acute — Hazardous to the aquatic environment - acute Aerosol — Aerosols Aquatic Chronic — Hazardous to the aquatic environment - chronic Flam. Liq. — Flammable liquid STOT SE — Specific target organ toxicity - single exposure - narcotic effects Acute Tox. — Acute toxicity - inhalation Acute Tox. — Acute toxicity - oral Eye Irrit. — Eye irritation

Key literature references and sources for data:

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended. Guidelines for the preparation of safety data sheets as amended (ECHA).

Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).

Safety data sheets for the constituent substances.

ECHA Homepage - Information about chemicals.

GESTIS Substance Database (Germany).

German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany). EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.

National Lists of Occupational Exposure Limits for each country as amended. Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

Förch SAS ZAE Le Marchais Renard CS 50125 Montereau-sur-le-Jard 77019 Melun Cedex Frankreich Tel. +33 1 64 14 48 48 Fax. +33 1 64 14 48 49 E-Mail: info@forch.fr Internet: www.forch.fr

Foerch Bulgaria EOOD 475 Botevgradsko Shose Blvd. BG 1517 Sofia, Bulgaria Tel. 00359 2 981 2841 Fax. 00359 982 10 30 86 E-Mail: info@foerch.bg S.C. Foerch S.R.L. Str. Zizinului nr.110 500407 Brasov Rumänien Tel. +40 368 408192 Fax. +40 368 408193 E-Mail: info@foerch.ro Internet: www.foerch.ro

Förch d.o.o. Buzinska cesta 58 10010 Zagreb Kroatien Tel. +385 1 2912900 Fax. +385 1 2912901 E-Mail: info@foerch.hr internet: www.foerch.hr Foerch AG Muttenzerstrasse 143 4133 Pratteln Schweiz Tel. +41 61 8262031 Fax. +41 61 8262039 E-Mail: info@foerch.ch Internet: www.foerch.ch

Theo Förch GmbH Röcklbrunnstraße 39A 5020 Salzburg Österreich Tel. +43 662 875574-0 Fax +43 662 878677-21 Verkauf Tel. +43 662 875574-900 Verkauf Fax +43 662 875574-30 E-Mail: info@foerch.at Internet: www.foerch.at



Page 18 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Förch Componentes para Taller S.L. Camino de San Antón, S/N 18102 Ambroz (Granada) Spanien Tel. +34 958 40 17 76 Fax. +34 958 40 17 87 E-Mail: info@forch.es Internet: www.forch.es

(GB)

Ziebe Limited 7 Century Court, Westcott, Aylesbury, Bucks, HP18 0XP (UK) Grossbritannien Tel +44 12 96 65 52 82 E-Mail: sales@ziebe.co.uk Internet: www.ziebe.co.uk

Förch Kereskedelmi Kft Börgöndi út 14 8000 Székesfehérvár Ungarn Tel. +36 22 348348 Fax. +36 22 348355 E-Mail: info@foerch.hu Internet: www.foerch.hu

AB varahlutir ehf Funahöfði 9 110 Reykjavík Tel. +354 567 6020 E-mail: ab@ab.is Internet: www.ab.is

Förch, s.r.o. Dopravní 1314/1 104 00 Praha 10 – Uhøínives Tschechien Tel. +420 271 001 984-9 E-Mail: info@foerch.cz Internet: www.foerch.cz

Troscoe Ltd Unit 6, 13 Highbrook Drive East Tamaki 2013, New Zealand Tel: +64 21 081 30780 / +64 21 024 05583 Email:sales@forchnz.co.nz Internet: www.forchnz.co.nz Förch A/S Hagemannsvej 3 8600 Silkeborg Dänemark Tel. +45 86 823711 Fax. +45 86 800617 E-Mail: info@foerch.dk Internet: www.foerch.dk

Førch Polska Sp. z.o.o Mikdzyrzecze Gorne 379 43-392 K/Bielska-Bialej Polen Tel. +48 338196000 Fax. +48 338158548 E-Mail: info@forch.pl Internet: www.forch.pl

Förch S.r.I. Via Antonio Stradivari 4 39100 Bolzano (BZ) Italien Tel: +39 0471 204330 Fax: +39 0471 204290 E-Mail: info@forch.it Internet: www.forch.it

Förch Slovensko s.r.o. Rosinská cesta 8 010 08 Žilina Slowakei Tel +421 41 5002454 E-Mail: info@forch.sk Internet: www.forch.sk

FORCH d.o.o. Ljubljanska cesta 51A 1236 Trzin Slowenien Tel. +386 1 2442490 Fax. +386 1 2442492 E-Mail: info@foerch.si Internet: www.foerch.si

Förch Portugal Lda Centro Empresarial Sintra-Estoril III Rua Pé de Mouro, Nr 33, Armazém J 2710-335 Sintra Portugal Tel. +351 917314442 E-Mail: info@forch.pt Internet: www.forch.pt Lhomme Tools & Fasteners BV Seinhuisstraat 5 B4 Poort 0331 3600 Genk Belgien Tel. +32 89 71 66 61 E-Mail: info@lhommetools.be Internet: www.lhommetools.be

Vardalis SM P.C. Ethnikis Antistasis 62 57007 Chalkidona-Thessaloniki Griechenland Tel. +30 23910 21222 Fax. +30 23910 21223 E-Mail: info@forch.gr Internet: www.forch.gr

Förch Nederland BV Twentepoort Oost 51 7609 RG Almelo Niederlande Tel. +31 85 77 32 420 E-Mail: info@foerch.nl Internet: www.foerch.nl

Förch Sverige AB Brännarevägen 1 151 55 Södertälje Schweden Tel. +46 855089264 E-mail: info@foerch.se Internet: www.foerch.se

Forch Australia 2 Forward Street Gnangara WA 6077 Tel. +61 (08) 9303 9113 Fax. +61 (08) 9303 9114 Emergency telephone: +614 13 550 330 Email : sales@forch.com.au Internet: www.forch.com.au

Trigers SIA Straupes iela 3 1073 Riga Lettland Tel. +371 6 7 90 25 15 Fax. +371 67 90 24 96 E-Mail: trigers@trigers.lv Internet: www.trigers.lv



Page 19 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200

Förch Otom.Ins.ve San.Ürün.Paz.Ltd.Sti. Haramidere Mevkii Beysan Sanayi Sitesi Birlik Caddesi No:6/3 34524 Beylikdüzü / Istanbul Türkei Tel. +90 (0)212 422 8744-45 Fax. +90 (0)212 422 8788 E-Mail: info@forch.com.tr Internet: www.forch.com.tr

(GB)

Total Consumables Ltd Coolnafearagh Monasterevin Co. Kildare W34 TX29 Irland Tel. +353871271473 Venus Arma d.o.o. Partner Theo Förch GmbH & Co. KG Batajnicki drum 18a 11080 Zemun Republika Srbija Tel. +381 11 407-20-91 Fax. +381 11 407-20-91 E-Mail: office@foerch.rs Internet: www.foerch.rs

Any abbreviations and acronyms used in this document:

according, according to acc., acc. to ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road) AOX Adsorbable organic halogen compounds approx. approximately Art., Art. no. Article number ASTM ASTM International (American Society for Testing and Materials) ATE Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany) BCF Bioconcentration factor BSEF The International Bromine Council body weight bw CAS **Chemical Abstracts Service** CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures) CMR carcinogenic, mutagenic, reproductive toxic DMEL Derived Minimum Effect Level DNEL Derived No Effect Level DOC Dissolved organic carbon dw dry weight e.g. for example (abbreviation of Latin 'exempli gratia'), for instance EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants) EC European Community ECHA European Chemicals Agency ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect EEC European Economic Community EINECS European Inventory of Existing Commercial Chemical Substances ELINCS European List of Notified Chemical Substances ΕN European Norms FPA United States Environmental Protection Agency (United States of America) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants) ErCx, $E\mu Cx$, ErLx (x = 10, 50) et cetera etc. EU European Union EVAL Ethylene-vinyl alcohol copolymer Fax. Fax number gen. general GHS Globally Harmonized System of Classification and Labelling of Chemicals GWP Global warming potential Adsorption coefficient of organic carbon in the soil Koc octanol-water partition coefficient Kow IARC International Agency for Research on Cancer International Air Transport Association IATA IBC (Code) International Bulk Chemical (Code) IMDG-code International Maritime Code for Dangerous Goods incl. including, inclusive IUCLID International Uniform Chemical Information Database IUPAC International Union for Pure Applied Chemistry LC50 Lethal Concentration to 50 % of a test population



(GB) Page 20 of 20 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 21.09.2022 / 0019 Replacing version dated / version: 01.11.2021 / 0018 Valid from: 21.09.2022 PDF print date: 23.09.2022 CU Welding Spray 400 ml Art.: 6200 2200, Art.: 6204 2200 LD50 Lethal Dose to 50% of a test population (Median Lethal Dose) Logarithm of adsorption coefficient of organic carbon in the soil Log Koc Log Kow, Log Pow Logarithm of octanol-water partition coefficient Limited Quantities LQ MARPOL International Convention for the Prevention of Marine Pollution from Ships n.a. not applicable not available n.av. not checked n.c. no data available n.d.a. NIOSH National Institute for Occupational Safety and Health (USA) NLP No-longer-Polymer NOEC, NOEL No Observed Effect Concentration/Level OECD Organisation for Economic Co-operation and Development org. organic OSHA Occupational Safety and Health Administration (USA) PBT persistent, bioaccumulative and toxic PΕ Polyethylene PNEC Predicted No Effect Concentration parts per million ppm **PVC** Polyvinylchloride REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List REACH-IT List-No. Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT. Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International RID Carriage of Dangerous Goods by Rail) SVHC Substances of Very High Concern Telephone Tel. TOC Total organic carbon UN RTDG United Nations Recommendations on the Transport of Dangerous Goods VOC Volatile organic compounds vPvB very persistent and very bioaccumulative wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.

These statements were made by:

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.