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

Trade name :	Bronze Oxide 4727 light blue		
Revision date :	14.12.2020	**Version (Revision) :**	14.0.4 (14.0.3)
Print date :	14.12.2020		

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

1.1 Product identifier

Bronze Oxide 4727
light blue (15060000000038)
Unique Formula Identifier (UFI): WQGD-T0E2-70F1-W9PP

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

Relevant identified uses

Industrial marking ink

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

Stefan Kupietz GmbH & Co. KG
Chemische Fabrik

Street : August-Wilhelm-Kühnholz-Str. 9
Postal code/city : 26135 Oldenburg
Telephone : +49(0)441/20 69 50
Telefax : +49(0)441 /20 69 520
Information contact : E-Mail: info@kupietz.de

1.4 Emergency telephone number

Poison emergency centre +49-551-19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 4 ; H332 - Acute toxicity (inhalative) : Category 4 ; Harmful if inhaled.
Skin Corr. 1A ; H314 - Skin corrosion/irritation : Category 1A ; Causes severe skin burns and eye damage.
Eye Dam. 1 ; H318 - Serious eye damage/eye irritation : Category 1 ; Causes serious eye damage.
Aquatic Chronic 2 ; H411 - Hazardous to the aquatic environment : Chronic 2 ; Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms

Corrosion (GHS05) · Environment (GHS09) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

NITRIC ACID 24 % ; CAS No. : 7697-37-2

Hazard statements

H314	Causes severe skin burns and eye damage.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash affected areas thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P310	Immediately call a POISON CENTER/doctor.
P321	Specific treatment (see information on this label).
P405	Store locked up.

2.3 Other hazards

None

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

NITRIC ACID ; REACH Registration No. : 01-2119487297-23-xxxx ; EC No. : 231-714-2; CAS No. : 7697-37-2

Weight fraction :	< 25 %
Classification 1272/2008 [CLP] :	Ox. Liq. 2 ; H272 Met. Corr. 1 ; H290 Acute Tox. 3 ; H331 Skin Corr. 1A ; H314 Eye Dam. 1 ; H318
Specific Conc. Limits :	Ox. Liq. 2 ; H272: C ≥ 99 % • Ox. Liq. 3 ; H272: C ≥ 65 % • Skin Corr. 1A ; H314: C ≥ 20 % • Eye Dam. 1 ; H318: C ≥ 5 % • Skin Corr. 1B ; H314: C ≥ 5 % • Skin Corr. 1C ; H314: C ≥ 5 % • Eye Irrit. 2 ; H319: C ≥ 1 % • Skin Irrit. 2 ; H315: C ≥ 1 %

COPPER SULPHATE ; REACH Registration No. : 01-2119520566-40-xxxx ; EC No. : 231-847-6; CAS No. : 7758-98-7

Weight fraction :	< 10 %
Classification 1272/2008 [CLP] :	Acute Tox. 4 ; H302 Skin Irrit. 2 ; H315 Eye Irrit. 2 ; H319 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

SELENOUS ACID ; EC No. : 231-974-7; CAS No. : 7783-00-8

Weight fraction :	< 5 %
Classification 1272/2008 [CLP] :	Acute Tox. 3 ; H301 Acute Tox. 3 ; H331 STOT RE 2 ; H373 Aquatic Acute 1 ; H400 Aquatic Chronic 1 ; H410

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Immediately remove all contaminated clothing.

Following inhalation

Provide fresh air. Rinse mouth with cold water. Take the casualty into the fresh air and keep warm.

In case of skin contact

Flush with plenty of water.

After eye contact

Flush with plenty of water (10 - 15 min.). Call a physician.

After ingestion

Drink plenty of water. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam , Carbon dioxide (CO2) , Extinguishing powder or Water spray jet .

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

None

5.4 Additional information

Cool endangered containers with water in case of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Provide for sufficient ventilation.

6.2 Environmental precautions

Take up with a liquid absorbing material and proceed according to the waste disposal regulations. Do not allow to enter into surface water or drains. Dilute with plenty of water. Use chemical neutralizer.

6.3 Methods and material for containment and cleaning up

For cleaning up

Remove mechanically, take-up residues with absorbing material.

6.4 Reference to other sections

None

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Normal precautions taken when handling chemicals should be observed. Avoid contact with skin and eyes. Only use in locations with adequate suction ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Do not leave vessels open, earth storage containers.

Hints on joint storage

Store the foodstuffs separately. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials.

Storage class (TRGS 510) : 8A

Further information on storage conditions

Store containers tightly closed in a cool well ventilated place.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

NITRIC ACID ; CAS No. : 7697-37-2

Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	1 ppm / 2,6 mg/m^3
Version :	29.03.2019

Limit value type (country of origin) : STEL (EC)
Limit value : 1 ppm / 2,6 mg/m^3
Version : 20.06.2019

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Use tightly fitting safety glasses.

Skin protection

Hand protection

Suitable gloves type : Use protective butyl rubber gloves (0,5 mm). Permeation time of glove material: level >= 240 min (4h) EN374, EN 388 and EN 420

Respiratory protection

None, but avoid breathing vapours if possible.

General information

The usual precautionary measures for the handling of chemicals have to be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Liquid
Colour : light blue
Odour : stinging

Safety characteristics

Physical state :			Liquid		
Freezing point :			No data available		
Initial boiling point and boiling range :	(1013 hPa)	>	100	°C	
Decomposition temperature :		>	200	°C	
Flash point :		>	61	°C	Brookfield
Auto-ignition temperature :			No data available		
Lower explosion limit :			No data available		
Upper explosion limit :			No data available		
Vapour pressure :	(50 °C)	<	20	hPa	
Density :	(20 °C)	~	1,124	g/cm^3	
Solvent separation test :	(20 °C)	<	3	%	
Water solubility :	(20 °C)		No data available		
pH :	(20 °C / 5 Wt %)	~	1		
log P O/W :			No data available		
Flow time :	(20 °C)	~	11	s	DIN-cup 4 mm
Odour threshold :			No data available		
Relative vapour density :	(20 °C)		No data available		
Vapourisation rate :			No data available		
Flammable aerosols :	No data available.				
Oxidising liquids :	No data available.				
Explosive properties :	No data available.				

9.2 Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1 Reactivity
No information available.

10.2 Chemical stability
No information available.

10.3 Possibility of hazardous reactions
No information available.

10.4 Conditions to avoid
None, if handled according to order. In connection with inorganic and organic acids, acid chlorides violent reactions can take place and CO2 released.

10.5 Incompatible materials
Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Formation of hydrogen by acids, lyes, moisture possible.

10.6 Hazardous decomposition products
No information available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Acute oral toxicity

Parameter :	LD50 (COPPER SULPHATE ; CAS No. : 7758-98-7)
Exposure route :	Oral
Species :	Rat
Effective dose :	300 mg/kg

Acute dermal toxicity

Practical experience/human evidence

The product causes skin corrosions,and it causes serious damage to eyes. Danger of irritation to eyes, nose, throat and the air passages.

Acute inhalation toxicity

Practical experience/human evidence

Slight narcotic effect. Prolonged inhalation of vapours in high concentrations may lead to headache, giddiness and nausea.

SECTION 12: Ecological information

12.1 Toxicity
No information available.

12.2 Persistence and degradability
In case of appropriate conduction into adapted biological purification plants no disturbances have to be expected.

12.3 Bioaccumulative potential
No indication of bioaccumulation potential.

12.4 Mobility in soil
Very high mobility in soil with a negligible tendency to leave the sediment.

12.5 Results of PBT and vPvB assessment
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

Do not empty into waters or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose according to legislation.

Directive 2008/98/EC (Waste Framework Directive)

After intended use

Waste codes/waste designations according to EWC/AVV

- 080111

Additional information

Contaminated packaging should be residue-free emptying. They can then be recycled after appropriate cleaning (Waste code 080112 contains no organic solvents). Contaminated packaging should be disposed of like the product. (Waste code 150110)

SECTION 14: Transport information

14.1 UN number

UN 3264

14.2 UN proper shipping name

Land transport (ADR/RID)

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)

Sea transport (IMDG)

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID · COPPER SULPHATE · SELENOUS ACID)

Air transport (ICAO-TI / IATA-DGR)

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (NITRIC ACID)

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) :	8
Classification code :	C1
Hazard identification number (Kemler No.) :	80
Tunnel restriction code :	E
Special provisions :	LQ 1 l · E 2
Hazard label(s) :	8 / N

Sea transport (IMDG)

Class(es) :	8
EmS-No. :	F-A / S-B
Special provisions :	LQ 1 l · E 2 · IMDG-Code segregation group 1 - Acids
Hazard label(s) :	8 / N

Air transport (ICAO-TI / IATA-DGR)

Class(es) :	8
Special provisions :	E 2
Hazard label(s) :	8

14.4 Packing group

II

14.5 Environmental hazards

Land transport (ADR/RID) : Yes
Sea transport (IMDG) : Yes (P)
Air transport (ICAO-TI / IATA-DGR) : Yes

14.6 Special precautions for user
None

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU legislation
Authorisations and/or restrictions on use
Restrictions on use
Use restriction according to REACH annex XVII, no. : 3
National regulations
Technische Anleitung Luft (TA-Luft)
Weight fraction (Number 5.2.2. III) : 7 - 8 %
Water hazard class (WGK)
Classification according to AwSV - Class : 3 (Strongly hazardous to water)

15.2 Chemical safety assessment
No information available.

SECTION 16: Other information

16.1 Indication of changes
03. Hazardous ingredients

16.2 Abbreviations and acronyms
None

16.3 Key literature references and sources for data
None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]
See SECTION 2.1 (classification).

16.5 Relevant H- and EUH-phrases (Number and full text)

H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

16.6 Training advice
None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.