

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

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

1.1. Product identifier

Product Code(s) VHG-TCUN-250

Product Name Copper Standard: Cu @ 10000 μg/mL in 5% HNO3

Unique Formula Identifier (UFI) 7QCC-D06W-D00T-7WU2

Pure substance/mixture Mixture

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

Recommended use Laboratory use

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Supplier

LGC Limited Queens Road Teddington Middlesex TW11 0LY UNITED KINGDOM :+44 (0) 20 8943 7000 Fax :+44 (0) 20 8943 2767 eMail : gb@lgcstandards.com

Web: www.lgcstandards.com

For further information, please contact

E-mail address sds-request@lgcgroup.com

1.4. Emergency telephone number

Emergency Telephone For Hazardous Materials or Dangerous Goods Incident

Spill, Leak, Fire Exposure, or Accident

Call CHEMTREC:

USA & Canada 1-800-424-9300 Rest of the world +1 703-741-5970

Emergency Telephone - §45 - (EC)1272/2008
Europe | 112

EGHS / EN Page 1/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Austria No information available Bulgaria Croatia Cyprus Czech Republic Denmark France Hungary Ireland Italy Lithuania Luxembourg Netherlands Norway Portugal Romania Slovakia Slovenia Spain Sweden Switzerland

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

109diation (20) 110 12/2/2000	
Skin corrosion/irritation	Category 1 Sub-category A - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)
Corrosive to metals	Category 1 - (H290)

2.2. Label elements



EGHS / EN Page 2/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 μg/mL in 5% HNO3

Hazard statements

H314 - Causes severe skin burns and eye damage

H410 - Very toxic to aquatic life with long lasting effects

H290 - May be corrosive to metals

Precautionary Statements - EU (§28, 1272/2008)

P260 - Do not breathe dust/fume/gas/mist/vapours/spray

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing and eye/face protection

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor

P391 - Collect spillage

P201 - Obtain special instructions before use

P234 - Keep only in original container

P406 - Store in corrosive resistant stainless steel container with a resistant inner liner

2.3. Other hazards

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

Endocrine Disruptor InformationThis product does not contain any known or suspected endocrine disruptors.Chemical nameEU - REACH (1907/2006) - Article 59(1)EU - REACH (1907/2006) - Endocrine- Candidate List of Substances of Very
High Concern (SVHC) for AuthorisationDisruptor Assessment List of
SubstancesNitric Acid--Copper--

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical nature aqueous solution.

Γ	Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
			number	Index No)	to Regulation (EC) No.	concentration		(long-term)
					1272/2008 [CLP]	limit (SCL)		

EGHS / EN Page 3/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Nitric Acid 7697-37-2	5 - <10	-	231-714-2		Ox. Liq. 2 ::	
Copper 7440-50-8	1 - <3	-	231-159-6	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		

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

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

	Chemical name	Oral LD50 mg/kg	Dermal LD50	Inhalation LC50 - 4	Inhalation LC50 - 4	Inhalation LC50 - 4
			mg/kg	hour - dust/mist - mg/L	hour - vapour - mg/L	hour - gas - ppm
Г	Nitric Acid	No data	No data available	No data available	2.65	No data available
L	7697-37-2	available				

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Inhalation Remove to fresh air. If breathing has stopped, give artificial respiration. Get medical

attention immediately. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur. Get immediate medical

advice/attention.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

EGHS / EN Page 4/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get immediate medical advice/attention.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated clothes

and shoes. Get immediate medical advice/attention.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Get immediate medical advice/attention.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use

barrier to give mouth-to-mouth resuscitation.

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

Symptoms Burning sensation.

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

Note to doctors Product is a corrosive material. Use of gastric lavage or emesis is contra-indicated. Possible

perforation of stomach or esophagus should be investigated. Do not give chemical

antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may

occur with moist rales, frothy sputum, and high pulse pressure.

SECTION 5: Firefighting measures

5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing mediaDo not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition

can lead to release of irritating gases and vapours.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Use personal protection equipment.

EGHS / EN Page 5/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal

protective equipment as required. Attention! Corrosive material. Evacuate personnel to safe

areas. Keep people away from and upwind of spill/leak.

Other information Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Should not be released into the

environment. Do not allow to enter into soil/subsoil. Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before

reuse.

General hygiene considerations Regular cleaning of equipment, work area and clothing is recommended. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear

suitable gloves and eye/face protection.

EGHS / EN Page 6/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials. Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Nitric Acid	-	STEL 1 ppm	STEL: 1 ppm	STEL: 1 ppm	STEL: 1 ppm
7697-37-2		STEL 2.6 mg/m ³	STEL: 2.6 mg/m ³	STEL: 2.6 mg/m ³	STEL: 2.6 mg/m ³
Copper	-	TWA: 1 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.2 mg/m ³
7440-50-8		TWA: 0.1 mg/m ³	TWA: 1 mg/m ³		TWA: 1 mg/m ³
		STEL 4 mg/m ³			STEL: 2 mg/m ³
		STEL 0.4 mg/m ³			
Chemical name	Cyprus	Czech Republic	Denmark	Estonia	Finland
Nitric Acid	STEL: 1 ppm	TWA: 1 mg/m ³	STEL: 1 ppm	STEL: 1 ppm	TWA: 0.5 ppm
7697-37-2	STEL: 2.6 mg/m ³	Ceiling: 2.5 mg/m ³	STEL: 2.6 mg/m ³	STEL: 2.6 mg/m ³	TWA: 1.3 mg/m ³
					STEL: 1 ppm
					STEL: 2.6 mg/m ³
Copper	-	TWA: 1 mg/m ³	TWA: 1.0 mg/m ³	TWA: 1 mg/m ³	TWA: 0.02 mg/m ³
7440-50-8		TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.2 mg/m ³	
		Ceiling: 2 mg/m ³			
		Ceiling: 0.2 mg/m ³			
Chemical name	France	Germany	Germany MAK	Greece	Hungary
Nitric Acid	STEL: 1 ppm	TWA: 1 ppm	-	STEL: 1 ppm	STEL: 2.6 mg/m ³
7697-37-2	STEL: 2.6 mg/m ³	TWA: 2.6 mg/m ³		STEL: 2.6 mg/m ³	
Copper	TWA: 0.2 mg/m ³	-	TWA: 0.01 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.1 mg/m ³
7440-50-8	TWA: 1 mg/m ³		Peak: 0.02 mg/m ³	TWA: 1 mg/m ³	TWA: 0.01 mg/m ³
	STEL: 2 mg/m ³			STEL: 2 mg/m ³	STEL: 0.2 mg/m ³
Chemical name	Ireland	Italy	Italy REL	Latvia	Lithuania
Nitric Acid	STEL: 1 ppm	STEL: 1 ppm	TWA: 2 ppm	TWA: 0.78 ppm	STEL: 1 ppm
7697-37-2	STEL: 2.6 mg/m ³	STEL: 2.6 mg/m ³	TWA: 5.2 mg/m ³	TWA: 2 mg/m ³	STEL: 2.6 mg/m ³

EGHS / EN Page 7/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 **Revision Number** 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 μg/mL in 5% HNO3

-							
				STEL: 4 ppm	STEL	_: 1 ppm	
				STEL: 10.3 mg/m ³		2.6 mg/m ³	
Copper	TWA	\: 0.2 mg/m ³	-	TWA: 0.2 mg/m ³		0.5 mg/m ³	TWA: 1 mg/m ³
7440-50-8		A: 1 mg/m ³			STEL:	: 1 mg/m ³	TWA: 0.2 mg/m ³
		EL: 2 mg/m ³					
	STE	L: 0.6 mg/m ³					
Chemical name		xembourg	Malta	Netherlands		orway	Poland
Nitric Acid		EL: 1 ppm	STEL: 1 ppm	STEL: 1.3 mg/m ³		: 2 ppm	STEL: 2.6 mg/m ³
7697-37-2	STE	L: 2.6 mg/m ³	STEL: 2.6 mg/m ³			5 mg/m ³	TWA: 1.4 mg/m ³
						_: 4 ppm	
						10 mg/m ³	
Copper		-	-	TWA: 0.1 mg/m ³		0.1 mg/m ³	TWA: 0.2 mg/m ³
7440-50-8						1 mg/m ³	
						: 3 mg/m ³	
						0.3 mg/m ³	
Chemical name		Portugal	Romania	Slovakia	,	ovenia	Spain
Nitric Acid		VA: 2 ppm	-	Ceiling: 2.6 mg/m ³		: 1 ppm	STEL: 1 ppm
7697-37-2		EL: 1 ppm				2.6 mg/m ³	STEL: 2.6 mg/m ³
	STE	L: 2.6 mg/m ³				STEL ppm	
					STEL: S	TEL mg/m ³	
Copper		\: 0.2 mg/m ³	TWA: 0.5 mg/m ³	TWA: 1 mg/m ³		-	TWA: 0.1 mg/m ³
7440-50-8	TW	A: 1 mg/m ³	STEL: 0.2 mg/m ³	TWA: 0.2 mg/m ³			
			STEL: 1.5 mg/m ³				
Chemical name		_	weden	Switzerland			ted Kingdom
Nitric Acid			: 0.5 ppm	TWA: 2 ppm			ΓEL: 1 ppm
7697-37-2			1.3 mg/m ³	TWA: 5 mg/m ³	3	STE	L: 2.6 mg/m ³
			KGV: 1 ppm	STEL: 2 ppm			
			(GV: 2.6 mg/m ³	STEL: 5 mg/m ²			
• • • • • • • • • • • • • • • • • • • •		NGV: ().01 mg/m ³	TWA: 0.1 mg/m			/A: 1 mg/m³
7440-50-8				STEL: 0.2 mg/m	1 ³		A: 0.2 mg/m ³
							L: 0.6 mg/m ³
						l ST	EL: 2 mg/m ³

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL) Predicted No Effect Concentration No information available. (PNEC)

No information available.

8.2. Exposure controls

EGHS / EN Page 8/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Personal protective equipment

Eye/face protection Tight sealing safety goggles. Face protection shield. Avoid contact with eyes. Wear safety

glasses with side shields (or goggles).

Hand protection Wear protective Neoprene™ gloves. Wear suitable gloves. Impervious gloves. The

protective gloves to be used must comply with the specifications of EC Directive

89/686/EEC and the related standard EN374.

Skin and body protectionLong sleeved clothing. Chemical resistant apron. Wear suitable protective clothing.

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Regular cleaning of equipment, work area and clothing is recommended. Remove and wash

contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear

suitable gloves and eye/face protection.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid
Appearance Liquid
Colour colourless
Odour Odourless.

Odour threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

Melting point / freezing pointNo data availableNone knownInitial boiling point and boiling rangeNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash pointNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

EGHS / EN Page 9/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

pH No data available None known

pH (as aqueous solution) No data available No information available Kinematic viscosity No data available None known Dynamic viscosity No data available None known Water solubility No data available None known Solubility(ies) No data available None known **Partition coefficient** No data available None known Vapour pressure No data available None known Relative density No data available None known

Bulk density
No data available
Liquid Density
No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle Size No information available Particle Size Distribution No information available

9.2. Other information

9.2.1. Information with regards to physical hazard classes Not applicable

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Exposure to air or moisture over prolonged periods.

10.5. Incompatible materials

EGHS / EN Page 10/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Incompatible materials Oxidising agent. Acids. Bases.

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. Corrosive by inhalation.

(based on components). Inhalation of corrosive fumes/gases may cause coughing, choking, headache, dizziness, and weakness for several hours. Pulmonary edema may occur with tightness in the chest, shortness of breath, bluish skin, decreased blood pressure, and increased heart rate. Inhaled corrosive substances can lead to a toxic edema of the lungs.

Pulmonary edema can be fatal.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye damage.

(based on components). Corrosive to the eyes and may cause severe damage including

blindness. May cause irreversible damage to eyes.

Skin contact Specific test data for the substance or mixture is not available. Corrosive. (based on

components). Causes burns.

Ingestion Specific test data for the substance or mixture is not available. Causes burns. (based on

components). Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung

damage if swallowed. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. Coughing and/ or wheezing.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (inhalation-vapour) 44.20 mg/l

EGHS / EN Page 11/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric Acid			= 2500 ppm (Rat) 1 h
			ATE (vapours) = 2.65 mg/L

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. Causes severe skin burns and eye

damage.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye damage. Causes

burns.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

EGHS / EN Page 12/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Unknown aquatic toxicityContains 0 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Copper	EC50: 0.031 - 0.054mg/L (96h, Pseudokirchneriella subcapitata) EC50: 0.0426 - 0.0535mg/L (72h, Pseudokirchneriella subcapitata)	LC50: 0.0068 - 0.0156mg/L (96h, Pimephales promelas) LC50: <0.3mg/L (96h, Pimephales promelas) LC50: =0.052mg/L (96h, Oncorhynchus mykiss) LC50: =0.112mg/L (96h, Poecilia reticulata) LC50: =0.2mg/L (96h, Pimephales promelas) LC50: =0.3mg/L (96h, Cyprinus carpio) LC50: =0.8mg/L (96h, Cyprinus carpio) LC50: =1.25mg/L (96h, Lepomis macrochirus)	-	EC50: =0.03mg/L (48h, Daphnia magna)

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

Chemical name	Partition coefficient	
Nitric Acid	-2.3	

12.4. Mobility in soil

Mobility in soil No information available.

EGHS / EN Page 13/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Nitric Acid	The substance is not PBT / vPvB PBT assessment does
	not apply
Copper	The substance is not PBT / vPvB PBT assessment does
	not apply

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14: Transport information

<u>IATA</u>

14.1 UN number or ID number UN2031

14.2 UN proper shipping name Nitric acid mixture

14.3 Transport hazard class(es)

14.4 Packing group

Description UN2031, Nitric acid mixture, 8, II

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions None ERG Code 8L

IMDG

14.1 UN number or ID number UN2031

14.2 UN proper shipping name Nitric acid mixture

EGHS / EN Page 14/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

14.3 Transport hazard class(es) 8
14.4 Packing group ||

Description UN2031, Nitric acid mixture, 8, II, Marine pollutant

14.5 Marine pollutant P
Environmental hazards Yes

14.6 Special precautions for user

Special Provisions None

EmS-No F-A, S-B No information available

14.7 Maritime transport in bulk No information available according to IMO instruments

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14.1 UN number or ID number UN2031

14.2 UN proper shipping name Nitric acid mixture

14.3 Transport hazard class(es) 8
14.4 Packing group ||

Description UN2031, Nitric acid mixture, 8, II, Environmentally Hazardous

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special Provisions None Classification code C1

ADR

14.1 UN number or ID number UN2031

14.2 UN proper shipping name Nitric acid mixture

14.3 Transport hazard class(es) 8
14.4 Packing group ||

Description UN2031, Nitric acid mixture, 8, II, (E), Environmentally Hazardous

14.5 Environmental hazards Yes

14.6 Special precautions for user

Special ProvisionsNoneClassification codeC1Tunnel restriction code(E)

SECTION 15: Regulatory information

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

Water hazard class (WGK) slightly hazardous to water (WGK 1)

Poland SDS created according to the following Polish regulation: Act of February 25, 2011 on

chemical substances and their mixtures (Journal of Laws of 2018, item 143, as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the

EGHS / EN Page 15/19



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Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency (EC) as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, as amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and method of classifying chemical substances and their mixtures (Journal of Laws of 2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling packaging of hazardous substances and mixtures and some mixtures (Journal of Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286). Announcement of the Minister of Economy, Labor and Social Policy of August 28, 2003 on the publication of the unified text of the Ordinance of the Minister of Labor and Social Policy on general health and safety at work regulations (Journal of Laws of 2003, No. 169, item 1650). Regulation of the Minister of Health of 30 December 2004 on occupational safety and health related to the presence of chemical agents in the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21) Regulation of the Minister of Health of December 30, 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the management of packaging and packaging waste, Journal of Laws 2013, item 888). Government statement of September 24, 2002 - European Agreement on the International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194, item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014).

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors

Product contains: Restricted explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 5 (1) and (3)

Chemical name	RESTRICTED EXPLOSIVES PRECURSORS - ANNEX I	REPORTABLE EXPLOSIVES PRECURSORS - ANNEX II
Nitric Acid - 7697-37-2	3 %w/w	-

Persistent Organic Pollutants

Not applicable

Dangerous substance category per Seveso Directive (2012/18/EU)

EGHS / EN Page 16/19



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Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

E1 - Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

International Inventories

TSCA Complies

DSL/NDSL
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status
ENCS
Contact supplier for inventory compliance status
IECSC
Contact supplier for inventory compliance status
KECL
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status
AllC
Contact supplier for inventory compliance status
Contact supplier for inventory compliance status

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report A Chemical Safety Assessment is not required for this substance

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H272 - May intensify fire; oxidiser

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H331 - Toxic if inhaled

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

EGHS / EN Page 17/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method
Corrosive to metals	On basis of test data

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

EGHS / EN Page 18/19



This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 29-Nov-2022 Revision Number 1

VHG-TCUN-250 - Copper Standard: Cu @ 10000 µg/mL in 5% HNO3

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

Revision date 29-Nov-2022

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

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End of Safety Data Sheet

EGHS / EN Page 19/19