

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-Jun-2023 Revision Number 1

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

1.1. Product identifier

Product Code(s) VHG-LPBN-100

Product Name Lead Standard: Pb @ 10 μg/mL in 2% HNO3

Form Not applicable

Unique Formula Identifier (UFI) FNYJ-H0SG-H003-6ST2

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

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Emergency Telephone - §45 - (EC)1								
Europe	112							
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

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Corrosive to metals	Category 1 - (H290)

2.2. Label elements



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Signal word

Warning

Hazard statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H290 - May be corrosive to metals

EUH071 - Corrosive to the respiratory tract

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

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves and eye/face protection

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

P390 - Absorb spillage to prevent material damage

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 Information

This product does not contain any known or suspected endocrine disruptors.

Chemical name	EU - REACH (1907/2006) - Article 59(1)	EU - REACH (1907/2006) - Endocrine
	- Candidate List of Substances of Very	Disruptor Assessment List of
	High Concern (SVHC) for Authorisation	Substances
Nitric Acid	-	-

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical nature aqueous solution.

Chemical name Weight-% REACH registration EC No (EU Classification according Specific M-Factor M-Factor	Chemical name	Weight-%	REACH registration	EC No (EU	Classification according	Specific	M-Factor	M-Factor
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		number	Index No)	to Regulation (EC) No. 1272/2008 [CLP]	concentration limit (SCL)		(long-term)
Nitric Acid 7697-37-2	1 - <3	-	231-714-2	,	Ox. Liq. 2 :: C>=99% Ox. Liq. 3 :: C≥65% Skin Corr. 1A :: C>=20% Skin Corr. 1B :: 5%<=C<20%		
Lead 7439-92-1	<0.1	-	(082-014-00 -7) 231-100-4	Carc. 2 (H351) Repr. 1A (H360FD) Lact. (H362) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Repr. 1A :: C>=0.03%	1	10

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
Nitric Acid 7697-37-2	No data available	No data available	No data available	2.65	No data 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.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur.

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

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

persists.

Skin contact Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical

attention if irritation develops and persists.

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

vomiting. Call a doctor.

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

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

Symptoms May cause redness and tearing of the eyes. Burning sensation.

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

Note to doctorsTreat symptomatically.

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

No information available.

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.

SECTION 6: Accidental release measures

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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.

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.

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 upTake 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. 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. 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.

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

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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
Lead	TWA: 0.15 mg/m ³	TWA: 0.1 mg/m ³	-	TWA: 0.05 mg/m ³	TWA: 0.15 mg/m ³
7439-92-1		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
Lead	TWA: 0.15 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³
7439-92-1		Ceiling: 0.2 mg/m ³	STEL: 0.1 mg/m ³	TWA: 0.05 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	STEL: 1 ppm
Lead	TWA: 0.1 mg/m ³	-	TWA: 0.004 mg/m ³	TWA: 0.15 mg/m ³	TWA: 0.1 mg/m ³
7439-92-1			Peak: 0.032 mg/m ³		TWA: 0.05 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
			STEL: 4 ppm	STEL: 1 ppm	
			STEL: 10.3 mg/m ³	STEL: 2.6 mg/m ³	
Lead	TWA: 0.15 mg/m ³	TWA: 0.15 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.05 mg/m ³	TWA: 0.15 mg/m ³
7439-92-1	STEL: 0.45 mg/m ³			STEL: 0.1 mg/m ³	TWA: 0.07 mg/m ³
Chemical name	Luxembourg	Malta	Netherlands	Norway	Poland
Nitric Acid	STEL: 1 ppm	STEL: 1 ppm	STEL: 0.5 ppm	TWA: 2 ppm	STEL: 2.6 mg/m ³
7697-37-2	STEL: 2.6 mg/m ³	STEL: 2.6 mg/m ³	STEL: 1.3 mg/m ³	TWA: 5 mg/m ³	TWA: 1.4 mg/m ³
				STEL: 4 ppm	
				STEL: 10 mg/m ³	

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Lead 7439-92-1	TWA	A: 0.15 mg/m ³ -			TWA: 0.15 mg/m ³		.05 mg/m ³	TWA: 0.05 mg/m ³
Chemical name		Portugal Romania			Slovakia	Slo	venia	Spain
Nitric Acid 7697-37-2	ST	WA: 2 ppm FEL: 1 ppm STEL: 2.6 mg/m ³ STEL: 2.6 mg/m ³		3	Ceiling: 2.6 mg/m ³	TWA: 2 STEL	: 1 ppm 2.6 mg/m ³ .: 1 ppm 2.6 mg/m ³	STEL: 1 ppm STEL: 2.6 mg/m ³
Lead 7439-92-1	TWA	: 0.05 mg/m ³	g/m³ TWA: 0.15 mg/m³		TWA: 0.15 mg/m ³ TWA: 0.5 mg/m ³		0.1 mg/m ³ 0.4 mg/m ³	TWA: 0.15 mg/m ³
Chemical name		Sweden			Switzerland		Uni	ted Kingdom
Nitric Acid 7697-37-2		NGV: 0.5 ppm NGV: 1.3 mg/m³ Bindande KGV: 1 ppm Bindande KGV: 2.6 mg/m³			TWA: 2 ppm TWA: 5 mg/m³ STEL: 2 ppm STEL: 5 mg/m³			TEL: 1 ppm EL: 2.6 mg/m³
Lead 7439-92-1			0.1 mg/m³).05 mg/m³		TWA: 0.1 mg/m³ STEL: 0.8 mg/m³			\: 0.15 mg/m ³ L: 0.45 mg/m ³

Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Lead	70 μg/100 mL -	120 μg/100 mL RBC	300 μg/L - blood	400 μg Pb/L - blood	13 µmol/mmol
7439-92-1	blood (Lead) - no	Erythrocyte	(Lead) - not fixed	(Lead) - not critical	Creatinine (urine -
	restriction	protoporphyrin	400 μg/L - blood	300 µg Pb/L - blood	
	0.075 mg/m ³ - air	(blood -	(Lead) - not fixed	(Lead) - not critical	acid discretionary)
	(Lead) - 40 hours	Ethylenediaminetetr		15 U/LE - blood	0.035 µmol/mmol
	per week	aacetic acid not		(.deltaAminolevulin	Creatinine (urine -
	40 μg/100 mL -	provided)		ic acid dehydratase)	Coproporphyrin
	blood (Lead) - no	30 μg/100 mL blood		- not critical	discretionary)
	restriction	Lead (blood -		1.50 mg/LE - blood	15 mg/g Creatinine
		Ethylenediaminetetr		(Protoporphyrin in	(urine -
		aacetic acid not		erythrocytes) - after	
		provided)		exposure during 2-3	
		3.8 million/µL		months (sample	0.2 mg/g Creatinine
		Erythrocytes (blood -		protected from light)	`
		Ethylenediaminetetr			Coproporphyrin
		aacetic acid not			discretionary)
		provided)			0.4 mg/L (blood -
		12 g/dL Hemoglobin			Lead discretionary)
		(blood -			
		Ethylenediaminetetr			
		aacetic acid not			
		provided)			

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		35	% Hematocrit					
			(blood -					
		Ethy	lenediaminetetr					
			cetic acid not					
			provided)					
		10	mg/L (urine -					
		.delta	aAminolevulini					
		c aci	d not provided)					
		3	.2 million/µL					
			rocytes (blood -					
		Ethy	lenediaminetetr					
		aa	cetic acid not					
			provided)					
		10 g/	dL Hemoglobin					
		l	(blood -					
		,	lenediaminetetr					
		aa	cetic acid not					
			provided)					
		30	% Hematocrit					
			(blood -					
			lenediaminetetr					
		l aa	cetic acid not					
		۾	provided) mg/L (urine -					
			aAminolevulini					
			d not provided)					
Chemical name	Denmark	C aci	Finland	Fra	ınce	Germany		Germany
Lead	20 µg/100 mL (blood	1 / 1	umol/L (blood -		L - blood	150 µg/L (wh	olo	150 µg/L (whole
7439-92-1	- Lead)		ad time of day	. 0	ad) -	blood - Lead		blood - Lead no
7 100 02 1	Load /		es not matter)		L - blood	restriction)		restriction)
		""	so not matter)		indifferent	150 µg/L - BAT		1004104011)
					ng time	fixed) blood		
					L - blood	30 μg/L - BAR		
					ad) -	fixed) blood		
					L - blood	40 μg/L - BAR	(not	
				(Lea	ad) -	fixed) blood	Ì	
				100 μg/l	L - blood			
				(Lea	ad) -			
								IA-II. DEL
Chemical name	Hungary		Ireland			Italy		Italy REL
Lead	Hungary -		70 μg/100 mL	(blood -		100 mL (blood -		μg/100 mL - blood
	Hungary -		70 µg/100 mL Lead not ci	(blood - ritical)				
Lead	Hungary -		70 µg/100 mL Lead not ci 40 µg/100 mL	(blood - ritical) (blood -		100 mL (blood -		μg/100 mL - blood
Lead	Hungary -		70 µg/100 mL Lead not co 40 µg/100 mL Lead not co	(blood - ritical) (blood - ritical)		100 mL (blood -		μg/100 mL - blood
Lead	Hungary -		70 µg/100 mL Lead not ci 40 µg/100 mL	(blood - ritical) (blood - ritical) (blood -		100 mL (blood -		μg/100 mL - blood

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Chemical name	Latvia	Luxembourg	Romania	Slovakia
Lead	30 μg/100 mL - blood	70 μg/100 mL - blood	150 μg/L - urine (Lead) -	400 μg/L (blood - Lead
7439-92-1	(Lead) -	(Lead) -	end of shift	not critical)
	100 μg/g Creatinine -	0.072 mg/m ³ - blood	70 μg/100 mL - blood	100 μg/L (blood - Lead
	urine (Coproporphyrin) -	(Lead) -	(Lead) - end of shift	not critical)
	5 mg/g Creatinine - urine	40 μg/100 mL - blood	3 mg/cm - hair (Lead) -	15 mg/L (urine -
	(Aminolevulinic acid) -	(Lead) -	end of shift	.deltaAminolevulinic acid
			10 mg/L - urine	not critical)
			(.deltaAminolevulinic	6 mg/L (urine -
			acid) - end of shift	.deltaAminolevulinic acid
			300 μg/L - urine	not critical)
			(Coproporphyrin) - end of	0.30 mg/L (urine -
			shift	Coproporphyrins not
			100 μg/100 mL	critical)
			erythrocyte - blood (free	
			erythrocytes	
			protoporphyrin) - end of	
			shift	
Chemical name	Slovenia	Spain	Switzerland	United Kingdom
Lead	400 μg/L - blood (Lead) -	70 μg/dL (blood - Lead	400 μg/L (whole blood -	-
7439-92-1	not relevant	not critical)	Lead no restrictions)	
	300 μg/L - blood (Lead) -		1.93 µmol/L (whole blood	
	not relevant		- Lead no restrictions)	
			100 μg/L (whole blood -	
			Lead no restrictions)	
			0.48 µmol/L (whole blood	
			- Lead no restrictions)	

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available. No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields. 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.

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Skin and body protection Long sleeved clothing. Wear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

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

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

Odour threshold No information available

Property Values Remarks • Method

 Melting point / freezing point
 0 °C
 None known

 Initial boiling point and boiling range100 °C
 None known

 Flammability
 No data available
 None known

Flammability Limit in Air None 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 temperature100 °CNone known

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 None known Water solubility No data available Solubility(ies) No data available None known **Partition coefficient** No data available None known Vapour pressure 23 hPa @ 20°C

Relative density 0.99821 g/cm3 at 20 °C None known

Bulk density
No data available
Liquid Density
No data available

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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 100 °C 100 °C

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

Stable under normal conditions. Stability

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge

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

Incompatible materials Oxidising agent. Strong acids. Strong 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

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Information on likely routes of exposure

Product Information

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

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

(based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. Causes skin irritation. (based

on components).

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

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

ATEmix (oral) 99,999.00 mg/kg
ATEmix (dermal) 99,999.00 mg/kg
ATEmix (inhalation-gas) 99,999.00 ppm
ATEmix (inhalation-dust/mist) 99,999.00 mg/l
ATEmix (inhalation-vapour) 139.50 mg/l

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/irritationClassification based on data available for ingredients. Causes skin irritation.

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

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Lead	Repr. 1A
	Lact.

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

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

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Unknown aquatic toxicity

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

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Lead	-	LC50: =0.44mg/L (96h,	-	EC50: =600µg/L (48h,
		Cyprinus carpio)		water flea)
		LC50: =1.17mg/L (96h,		·
		Oncorhynchus mykiss)		
		LC50: =1.32mg/L (96h,		
		Oncorhynchus mykiss)		

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.

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
Lead	PBT assessment does not apply

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

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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

IATA

14.1 UN number or ID number UN3264

14.2 UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)

14.3 Transport hazard class(es)

14.4 Packing group

Ш Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions A3, A803 **ERG Code** 8L

IMDG

14.1 UN number or ID number UN3264

14.2 UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)

NP

14.3 Transport hazard class(es)

14.4 Packing group

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III

14.5 Marine pollutant

14.6 Special precautions for user

Special Provisions 223, 274

EmS-No.

F-A, S-B No information available

No information available 14.7 Maritime transport in bulk

according to IMO instruments

RID

14.1 UN number or ID number UN3264

14.2 UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)

14.3 Transport hazard class(es) Ш

14.4 Packing group

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III

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14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions 274
Classification code C1

ADR

14.1 UN number or ID number UN3264

14.2 UN proper shipping name Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)

14.3 Transport hazard class(es) 814.4 Packing group | | | | |

Description UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III, (E)

14.5 Environmental hazards Not applicable

14.6 Special precautions for user

Special Provisions 274
Classification code C1
Tunnel restriction code (E)

SECTION 15: Regulatory information

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

National regulations

France

Occupational Illnesses (R-463-3, France)

Coodpational Infecces (It 400 of France)		
Chemical name	French RG number	Title
Lead	RG 1	-
7439-92-1		

Water hazard class (WGK) non-hazardous to water (nwg)

Netherlands

Chemical name	Netherlands - List of	Netherlands - List of	Netherlands - List of
	Carcinogens	Carcinogens	Reproductive Toxins
Lead	-	-	Fertility Category 1A
			Development Category 1A
			Can be harmful via
			breastfeeding

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

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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 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 contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

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

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

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Nitric Acid - 7697-37-2	75.	
Lead - 7439-92-1	72.	

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30.	
63.	
75.	

Persistent Organic Pollutants

Not applicable

Chemical name	European Export/Import Restrictions per (EC) 689/2008 - Annex
	Number
Lead - 7439-92-1	l.1

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

Not applicable

EU - Water Framework Directive (2000/60/EC)

	o water rumework birective (2000/00/20)		
Chemical name		EU - Water Framework Directive (2000/60/EC)	
	Lead - 7439-92-1	Priority substance	

EU - Environmental Quality Standards (2008/105/EC)

Chemical name	EU - Environmental Quality Standards (2008/105/EC)
Lead - 7439-92-1	Priority substance

International Inventories

TSCA Complies

DSL/NDSL
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

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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

EUH071 - Corrosive to the respiratory tract

H272 - May intensify fire; oxidiser

H290 - May be corrosive to metals

H314 - Causes severe skin burns and eye damage

H331 - Toxic if inhaled

H351 - Suspected of causing cancer

H360FD - May damage fertility. May damage the unborn child

H362 - May cause harm to breast-fed children

H372 - Causes damage to organs through prolonged or repeated exposure

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

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

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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)

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

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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

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