SPECTRASCAN°

SAFETY DATA SHEET

Issuing Date 30-May-2017 Revision Date 13-Aug-2014 Revision Number 1

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name/Catalog ID SS-50170

Product Description 10 μg/mL 204Lead

Contains Nitric acid

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

Recommended Use Laboratory chemicals

Uses advised against No information available

1.3. Details of the supplier of the safety data sheet

Company

Teknolab P.O. Box 33 1411 Kolbotn Norway

Tel: + 47 66 81 34 70 Fax: + 47 66 81 34 71 Web: www.spectrascan.no

1.4. Emergency telephone number

Chemtrec 1-800-424-9300 (North America) Chemtrec +1 703-741-5970 (International)

Europe See above

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s)

C - Corrosive

R-code(s)

C;R34

GHS

Skin corrosion/irritation

Category 1 Sub-category B - (H314)

For the full text of the R phrases mentioned in this Section, see Section 16

2.2. Label Elements

Product identifier

Contains Nitric acid



Signal word Danger

Hazard statements

H314 - Causes severe skin burns and eye damage

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

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

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

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/physician

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

2.3. Other information

Inhalation of vapors in high concentration may cause irritation of respiratory system Aspiration may cause pulmonary edema and pneumonitis

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC No	CAS No	Weight-%	Classification according to Directive 67/548/EEC or 1999/45/EC	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Reg
Nitric acid	EEC No. Present	7697-37-2	5	C; R35 O; R8	(EUH071) Skin Corr. 1A (H314) Ox. Lig. 2 (H272)	No data avail

For the full text of the R phrases mentioned in this Section, see Section 16

For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4: FIRST AID MEASURES

4.1. Description of first-aid measures

General Advice Immediate medical attention is required. Show this safety data sheet to the doctor in

attendance.

Inhalation Call a physician or Poison Control Center immediately. Move to fresh air. If breathing is

difficult, give oxygen. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

Skin Contact Immediate medical attention is required. Wash off immediately with soap and plenty of

water removing all contaminated clothes and shoes.

Eye Contact Immediate medical attention is required. Immediately flush with plenty of water. After initial

flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye

wide open while rinsing. Do not rub affected area.

Immediate medical attention is required. Do NOT induce vomiting. Clean mouth with water

and afterwards drink plenty of water. Never give anything by mouth to an unconscious

person.

Protection of First-aidersUse personal protective equipment. Avoid contact with skin, eyes and clothing.

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

Most Important Symptoms and

Effects

Burn. Difficulty breathing.

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

Notes to Physician Product is a corrosive material. Use of gastric lavage or emesis is contraindicated.

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: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions

Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Do not get in eyes, on skin, or on clothing.

Advice for emergency responders

Ensure adequate ventilation.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains.

6.3. Methods and materials 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 and collect in suitable container for disposal.

6.4. Reference to other sections

See Section 12: ECOLOGICAL INFORMATION.

Section 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Technical measures/Precautions

Ensure adequate ventilation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures/Precautions

Keep container tightly closed in a dry and well-ventilated place.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

Chemical Name	EU		The United K	ingdom	Fra	ance		Spain	Germany
Nitric acid	STEL 1 ppm		STEL: 1 ppm		STEL: 1 ppm		S.	TEL: 1 ppm	TWA: 1 ppm
7697-37-2	STEL 2.6 mg/m	n ³	STEL: 2.6 r	ng/m³	STEL: 2	2.6 mg/m ³	STE	L: 2.6 mg/m ³	TWA: 2.6 mg/m ³
Component	Italy	Italy		Portugal		The Netherlands		Finland	Denmark
Nitric acid	STEL: 1 ppr	n	STEL: 4	ppm	STEL:	1.3 mg/m ³	T۱	VA: 0.5 ppm	
7697-37-2 (5)	STEL: 2.6 mg/	/m³	TWA: 2	ppm		Ü	TV	/A: 1.3 mg/m ³	
` ,							l s	TEL: 1 ppm	
							STI	EL: 2.6 mg/m ³	
Chemical Name	Sweden		Austria	Switz	erland	Poland	t	Norway	Ireland
Nitric acid	LLV: 2 ppm	ST	ΓEL 1 ppm	STEL	2 ppm	STEL: 2.6 r	ng/m³	TWA: 2 ppm	STEL: 1 ppm
7697-37-2	LLV: 5 mg/m ³	STE	L 2.6 mg/m ³	STEL:	5 mg/m ³	TWA: 1.4 n	ng/m³	TWA: 5 mg/m ³	STEL: 2.6 mg/m ³
	STV: 5 ppm		-	TWA:	2 ppm		•	STEL: 2 ppm	
	STV: 13 mg/m ³			TWA:	5 mg/m ³			STEL: 5 mg/m ³	

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration No inform

(PNEC)

No information available.

8.2. Exposure controls

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection Tightly fitting safety goggles.

Hand Protection Impervious gloves.

Skin and Body Protection Impervious clothing. Boots. Chemical resistant apron.

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators. If exposure limits are exceeded or irritation is experienced,

NIOSH/MSHA approved respiratory protection should be worn.

Environmental Exposure Controls Prevent product from entering drains.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid

Appearanceclear / colorlessOdorOdorless

Property Values

pH VALUENo data availableMelting Point/RangeNo data availableBoiling Point/Range100 °C

Evaporation rate No data available

SS-50170

No data available Flammability (solid, gas) **Vapor Pressure** No data available Vapor density No data available **Relative Density** No data available **Specific Gravity** No data available Miscible

Water Solubility

No data available Partition coefficient: n-octanol/water **Autoignition temperature** No data available **Decomposition temperature** No data available **Viscosity** No data available

Explosive Properties No information available **Oxidizing Properties** No information available

Other information

VOC Content No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available.

10.2. Chemical Stability

Stable under normal conditions.

Explosion Data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

10.3. Possibility of Hazardous Reactions

Hazardous Polymerization

Hazardous polymerization does not occur.

Hazardous Reactions

None under normal processing.

10.4. Conditions to Avoid

None known.

10.5. Incompatible materials

Reducing agent

10.6. Hazardous Decomposition Products

Nitrogen oxides (NOx).

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information The product causes burns of eyes, skin and mucous membranes.

InhalationContact with moist mucous membranes of the respiratory system can cause caustic

condition resulting in burns. Aspiration may cause pulmonary edema and pneumonitis. Causes burns. Corrosive to respiratory system. Inhaled corrosive substances can lead to a

toxic edema of the lungs.

Eye Contact Causes burns.

Skin Contact Causes burns.

Ingestion Can burn mouth, throat, and stomach.

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

ATEmix (inhalation-dust/mist) 436.00 mg/l ATEmix (inhalation-vapor) 1,340.00 mg/l

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity.

Skin corrosion/irritationNo information available.

Eye damage/irritation No information available.

Sensitization No information available.

Mutagenic Effects No information available.

Carcinogenic effects No information available.

Reproductive Toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Target Organ Effects Skin, Eyes, Respiratory system.

Aspiration hazard No information available.

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

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

Chemical Name	Algae/aquatic plants	Fish	Crustacea	
Nitric acid		72: 96 h Gambusia affinis mg/L		
		LC50		

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

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

No information available.

12.6. Other adverse effects.

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues/Unused

Products

Dispose of in accordance with federal, state and local regulations.

Contaminated Packaging Do not re-use empty containers.

Other Information According to the European Waste Catalogue, Waste Codes are not product specific, but

application specific. Waste codes should be assigned by the user based on the application

for which the product was used.

Section 14: TRANSPORT INFORMATION

IMDG

14.1. UN-No UN3264

14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s

14.3. Hazard Class 8 **14.4. Packing Group** III

Description Not applicable

14.5. Marine Pollutant 14.6. Special ProvisionsNone

14.7. Transport in bulk according No information available

to Annex II of MARPOL 73/78 and

the IBC Code

RID

14.1. UN-No UN3264

14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s

14.3. Hazard Class 8 **14.4. Packing Group** III

Description Not applicable

14.5. Environmental hazard None 14.6. Special Provisions None

ADR

14.1. UN-No UN3264

14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s

14.3. Hazard Class 8 **14.4. Packing Group** III

Description Not applicable

14.5. Environmental hazardNone14.6. Special ProvisionsNone

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ICAO

14.1. UN-No UN3264

14.2. Proper Shipping Name Corrosive liquid, acidic, inorganic, n.o.s

14.3. Hazard Class 8
14.4. Packing Group III

Description Not applicable

14.5. Environmental hazard None **14.6. Special Provisions** None

IATA-DGR

14.1. UN-No UN3264

14.2. Proper shipping name Corrosive liquid, acidic, inorganic, n.o.s

14.3. Hazard Class 8
14.4. Packing Group III

Description Not applicable

14.5. Environmental hazard None **14.6. Special Provisions** None

Section 15: REGULATORY INFORMATION

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

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

International Inventories

All of the components in the product are on the following Inventory lists: U.S.A. (TSCA), Europe (EINECS/ELINCS/NLP), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), China (IECSC), Australia (AICS), Korea (ECL).

Complies **TSCA EINECS/ELINCS** Complies Complies DSL/NDSL **PICCS** Complies **ENCS** Complies **IECSC** Complies **AICS** Complies **KECL** Complies

<u>Legend</u>

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

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

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

15.2. Chemical Safety Assessment

No information available

Section 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R35 - Causes severe burns

R8 - Contact with combustible material may cause fire

R34 - Causes burns

Full text of H-Statements referred to under section 3

H314 - Causes severe skin burns and eye damage

H272 - May intensify fire; oxidizer

Revision Date 13-Aug-2014

Reason for Revision Not applicable.

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of Safety Data Sheet