Vickers Laboratories Ltd - Safety Data Sheet 3210

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 1.1 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier 3210

Product Name MERCURIC THIOCYANATE

CAS Number 592-85-8
REACH Registration No A registration number is not available as the substance or its uses are exempt, the annual tonnage does not require a registration or the registration is envisaged for a later date.

Molecular Formula $Hg(SCN)_2 = 316.74$

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd

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(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Acute toxicity, category 1 (dermal)	H310: Fatal in contact with skin.
Acute toxicity, category 2 (oral)	H300: Fatal if swallowed.
Acute toxicity, category 2 (inhalation)	H330: Fatal if inhaled.
Spec target organ tox - repeat, category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	Fatal if swallowed. Fatal if inhaled. Fatal in contact with skin. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.
Precautionary Statements	Do not breathe dust. Wear protective gloves / protective clothing. Do not get in eyes, on skin, or on clothing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician.
Supplemental Hazard Information (EU)	Contact with acids liberates very toxic gas.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Mercury thiocyanate	592-85-8	209-773-0		>99.9%	Acute Tox. 1 (D),Acute Tox. 2 (O),Acute Tox. 2 (I),STOT RE 2,Aquatic Acute 1,Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. Unless contact has been slight OBTAIN MEDICAL ATTENTION
Skin	Wash off skin thoroughly with water. OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest. OBTAIN MEDICAL ATTENTION.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing vapour. Evacuate area immediately. Use approved personal protective equipment. Do not allow other people to enter area. Do not allow general use of area until it is safe to do so.

6.2 Environmental precautions

Enviromental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.

6.3 Methods and material for containment and cleaning up

Major Spillage	Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.
Minor Spillage	Vacuum up into container for removal. Carefully remove material from vacuum cleaner and transfer to sealable container for disposal. Carry out this operation under fume extraction. Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Mercury thiocyanate	592-85-8	>99.9%	-	-	0.025 ppm	-

Exposure data source(s)	IOELV: Indicative Occupational Exposure Limit Value.

8.2 Exposure controls

Respiratory Protection	Use L.E.V. or natural ventilation to maintain vapour concentrations below exposure limits. If not, use a well maintained chemical cartridge respirator, or use self contained breathing apparatus.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White crystalline solid.
Odour	No specific odour.
pH	Not applicable
Boiling Point	302°C

Melting Point	276°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	Not available
Water Solubility	7.4%

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	No specific conditions.
10.5	Incompatable Materials	Forms explosive compounds with ammonia, acetylenic compounds, azides and ethylene oxide.
10.6	Hazardous Decomposition Products	Decomposes to emit highly toxic fumes of mercury.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or solution may be irritating to the eyes.
Skin	Contact with the solid or solution may be irritating to the skin. Very toxic in contact with skin.
LD50 Skin	5 mg/Kg
Ingestion	Toxic if swallowed. Chronic poisoning leads inflammation of mouth and gums, excessive salivation, loosening of teeth, kidney damage, muscle tremors, jerky gait, and spasms of extremities. Personality changes may occur including, depression, irritability and nervousness.
LD50 Oral	46 mg/Kg Rat
Inhalation	Very toxic by inhalation.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Has been found to cause cancer in laboratory animals.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Mercury and its compounds are highly toxic to the environment. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.
	LC50 Algal	0.162 mg/L Algae (96 hours)
	LC50 Crustacea	0.0052 mg/L Daphnia magna (48 hours)
	LC50 Fish	0.15 mg/L Fathead Minnow (96 hours)
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.

12.6 Other adverse effects — None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods — Add a mixture of equal amounts of slaked lime (calcium hydroxide) and flowers of sulphur wetted with enough water to form a thin paste prior to disposal via an authorised toxic waste service.

Contaminated Packaging — Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number — 1646

14.2 Proper Shipping Name — Mercury thiocyanate

14.3 Transport classes

UN classification	6.1
Subsidiary hazard(s)	None
Transport category	2
ADR Hazard ID	60
Tunnel Restriction Code	D/E

14.4 Packing Group — II

14.5 Environment hazards — See section 12.

14.6 Special precautions for user — No special precautions required.

14.7 Transport in bulk — Not transported in bulk.

Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification — Acute toxicity, category 1 (dermal); Acute toxicity, category 2 (oral); Acute toxicity, category 2 (inhalation); Spec target organ tox - repeat, category 2; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word — Danger

Hazard Pictograms

Hazard Statements — H300, H330, H310, H373, H400, H410
Fatal if swallowed. Fatal if inhaled. Fatal in contact with skin. May cause damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary Statements — P260, P280, P262, P301+P330+P331, P304+P340, P309+P311
Do not breathe dust. Wear protective gloves / protective clothing. Do not get in eyes, on skin, or on clothing. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician.

Supplemental Hazard Information (EU) — EUH032
Contact with acids liberates very toxic gas.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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