Vickers Laboratories Ltd - Safety Data Sheet 1743

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

Revision: 1.2 Revision date: 16 April 2021
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Section 1. Identification

1.1 Product Identifier 1743

Product Name KARL FISCHER REAGENT (stabilized)

CAS Number Mixture
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.

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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Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Flammable liquid, category 3	H226: Flammable liquid and vapour.
Acute toxicity, category 3 (inhalation)	H331: Toxic if inhaled.
Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Skin corrosion/irritation, category 2	H315: Causes skin irritation.
Acute toxicity, category 4 (dermal)	H312: Harmful in contact with skin.
Serious eye damage/irritation, category 2	H319: Causes serious eye irritation.
Reproductive toxicity, category 1B	H360: May damage fertility or the unborn child.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements	Flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May damage fertility or the unborn child.
Precautionary Statements	Keep container tightly closed. Wear protective gloves / protective clothing / eye protection / face protection. Avoid breathing dust / fume / gas / mist / vapours / spray. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

Section 3. Composition

3.2 Mixtures

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Methanol	67-56-1	200-659-6	01-2119433307-44-XXXX	>50%	Flam. Liq. 2,Acute Tox. 3 (O),Acute Tox. 3 (D),Acute Tox. 3 (I),STOT SE 1
Pyridine	110-86-1	203-809-9		25%	Flam. Liq. 2,Acute Tox. 4 (O),Skin Irrit. 2,Acute Tox. 4 (D),Acute Tox. 4 (I),Eye Irrit. 2
Iodine	7553-56-2	231-442-4		15%	Acute Tox. 4 (D),Acute Tox. 4 (I),STOT SE 3 (I),STOT RE 1,Aquatic Acute 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. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. Remove contaminated clothing immediately and wash before re-use. In severe cases or if exposure has been great, OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure. Keep warm and at rest. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. OBTAIN MEDICAL ATTENTION URGENTLY.
Ingestion	If conscious give plenty of water to drink. Do not induce vomiting. If there is difficulty in breathing give oxygen if available. If breathing stops or shows signs of failing, apply artificial resuscitation. If unconscious place in the recovery position. 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	Alcohol resistant foam, dry powder, carbon dioxide or vaporising liquid. Use water spray to keep fire exposed containers cool.
Unsuitable Media	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards	Vapour-air mixtures are explosive. Vapours may flow along surfaces to distant ignition sources and flash back.

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: Ensure no sources of ignition. Avoid breathing vapour. Use approved personal protective equipment. Evacuate area immediately. Do not allow general use of area until it is safe to do so. Beware : vapour is heavier than air and will tend to accumulate at low spots.

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: Contain and absorb on inert material. Transfer absorbent to salvage container for removal. Wash area down with copious amounts of water.

Minor Spillage: Contain and absorb on inert material. Transfer absorbent to container for removal. Allow solvent to evaporate in remote area, then dispose of absorbent as solid chemical waste. 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

All transfer systems should be earthed to prevent accumulation of static electricity. Avoid contact with skin and eyes. Do not breath vapours. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains vapour concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect from direct sun and store away from sources of ignition. Keep containers closed when not in use.

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)	
Methanol	67-56-1	>50%	200.0 ppm	266.0 mg/m-3	250.0 ppm	333.0 mg/m-3
Pyridine	110-86-1	25%	5.0 ppm	10.0 mg/m-3	16.0 ppm	33.0 mg/m-3
Iodine	7553-56-2	15%	-	-	0.1 ppm	1.0 mg/m-3

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 organic vapour respirator, or use self contained breathing apparatus.

Hand Protection: Use solvent resistant gloves.

Eye Protection: Use tightly fitting chemical splash proof glasses or goggles.

Skin Protection: Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.

Special Hazards: No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Orange-brown to dark orange-brown solution.
Odour	Pungent.
pH	Not applicable
Boiling Point	70°C
Melting Point	-25°C
Flash Point	12°C (Closed cup)
Upper Flammable Limit	12.4%
Lower Flammable Limit	2%
Auto Ignition	Not applicable
Explosive Properties	Moderate/severe in confined spaces.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	0.9000
Water Solubility	Completely miscible in water.

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	Hot surfaces, naked flames or other sources of ignition.
10.5	Incompatable Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Both the vapour and liquid will, be irritating to the eyes but unlikely to cause serious injury.
Skin	Can be absorbed through the skin and may cause irritation and dermatitis.
LD50 Skin	Not available
Ingestion	Harmful if swallowed.
LD50 Oral	Not available
Inhalation	Exposure to vapour concentrations above the occupational exposure limits will produce irritation of the eyes and respiratory tract. Symptoms include drowsiness, mental confusion and unconsciousness. effects the central nervous system resulting in gastrointestinal tract causing, headache, nausea, giddiness, vomiting, insomnia and anorexia.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	May be a mutagen.
Reproductive Effects	At low concentrations possesses no hazard to reproduction or teratogenic effects.
Other Information	The vapour can be detected from its smell at 1ppm. This does not, however, act as a reliable warning due to olfactory fatigue.

Section 12. Ecological

12.1	Toxicity	Moderately toxic to mammals, fish and bacteria.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available

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.

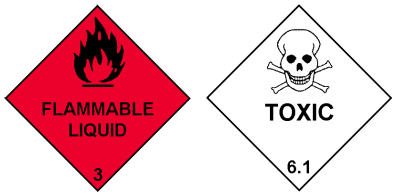
Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of in a licensed incinerator for organic solvents. Do not dispose of as domestic waste. Never dispose of into water courses or sewerage systems due to high risk of explosion.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1	**UN Number**	1992
14.2	**Proper Shipping Name**	Flammable liquid, toxic, N.O.S.
14.3	**Transport classes**	
	UN classification	3
	Subsidiary hazard(s)	6.1
	Transport category	2
	ADR Hazard ID	336
	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	Flammable liquid, category 3; Acute toxicity, category 3 (inhalation); Acute toxicity, category 4 (oral); Skin corrosion/irritation, category 2; Acute toxicity, category 4 (dermal); Serious eye damage/irritation, category 2; Reproductive toxicity, category 1B
Signal word	Danger
Hazard Pictograms	
Hazard Statements	H226, H302, H312, H315, H319, H331, H360 Flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Toxic if inhaled. May damage fertility or the unborn child.
Precautionary Statements	P233, P280, P261, P301+P310, P331 Keep container tightly closed. Wear protective gloves / protective clothing / eye protection / face protection. Avoid breathing dust / fume / gas / mist / vapours / spray. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

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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