



Aquamax KF Reagent "C"

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

Chemical Name	Aquamax KF Reagent "C"
Use	Laboratory and industrial reagent.
Manufacturer	ROMIL Ltd The Source, Convent Drive, Waterbeach, Cambridge, CB25 9QT United Kingdom
Telephone	+44 (0) 1223 863 873
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Emergency Telephone	+44 (0) 1223 863 873 (office hours only)
Product Code(s)	620003

2 HAZARDS IDENTIFICATION

GHS Classification	Flammable Liquid, Category 2 Acute Toxicity, Inhalation, Category 3 Acute Toxicity, Dermal, Category 3 Acute Toxicity, Oral, Category 3 Skin irritation, Category 2 Serious eye damage, Category 1 Specific target organ toxicity - single exposure, Category 1 Specific target organ toxicity - repeated exposure, Category 2
EC Classification	F: R11 Highly flammable. T: R23/24/25 Toxic by inhalation, in contact with skin and if swallowed. T+: R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

GHS Labelling

Hazard Pictogram(s)



Signal Word

Danger

Hazard Statement(s)

H225	Highly flammable liquid and vapour.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H370	Causes damage to organs.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s)

P210	Keep away from heat/ sparks/ open flames/ hot surfaces. - No smoking.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309+P310	IF exposed or you feel unwell: Immediately call a POISON CENTER or doctor/ physician.
P403+P235	Store in a well ventilated place. Keep cool.

EC Labelling

Hazard Symbols



Risk Phrases

R11	Highly flammable.
R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.

Safety Phrases

S7	Keep container tightly closed
S16	Keep away from sources of ignition - No smoking.
S24	Avoid contact with skin.
S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Other Hazards

None known.



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3 COMPOSITION/INFORMATION ON INGREDIENTS

Methanol CAS 67-56-1 EC 200-659-6	>50% GHS: Flam. Liq. 2; STOT SE 1; Acute Tox I. 3; Acute Tox D. 3; Acute Tox O. 3; H225, H301+H311+H331, H370 EC: F: R11; T: R23/24/25; R39/23/24/25
Dialkylalcoholamine	>1% & <15% GHS: Acute Tox O. 4; STOT RE 2; Skin Irrit. 2; Ser. Eye Dmg 1; H302, H373, H315, H318 EC: Xn: R22; Xn: R48/22; Xi: R38 Xi: R41
Sulphur Dioxide CAS 7446-09-5 EC 231-195-2	>1% & <3% GHS: Press. Gas; Acute Tox. I. 3; Skin Corr. 1B; H314, H331 EC: T: R23; C: R34

Other ingredients at concentrations not classified as hazardous.

See section 16 for the full text of classification codes.

4 FIRST-AID MEASURES

Skin Contact	Flood the splashed surface with large quantities of running water. Remove contaminated clothing. Obtain medical attention.
Eye Contact	Irrigate thoroughly with water or saline solution for at least 15 minutes. Obtain medical attention. Remove contact lenses if possible.
Ingestion	Wash mouth out with large quantities of water. If the chemical has been swallowed, make casualty drink plenty of water or alcoholic beverage (40% ethanol). Obtain medical attention (mention methanol ingestion). In exceptional cases, if no medical care is available within one hour, induce vomiting ONLY if casualty is conscious and continue to drink water or alcoholic beverage.
Inhalation	Remove victim immediately to fresh air, keep warm and at rest (in the recovery position). If breathing is weak, irregular or has stopped, commence artificial respiration. Oxygen may be beneficial. > In all cases of exposure, refer to medical attention.

5 FIRE-FIGHTING MEASURES

Special Exposure Hazard	Material is highly flammable. Vapours are heavier than air and may spread along floors. Hazardous gases or vapours may form in the event of fire. Vapour/air mixtures are explosive. Beware of flashback.
Extinguishing Media	Extinguish with carbon dioxide, dry chemical, foam or waterspray. Keep drums cool by spraying with water.

6 ACCIDENTAL RELEASE MEASURES

Personal Protection	Wear suitable protective clothing, gloves and eye/face protection. Do not inhale vapours. Wear a suitable respiratory protection device if the situation demands.
Leaks and Spills	Shut off ignition sources. Instruct others to keep at a safe distance. Contain or absorb leaking liquid with sand or earth. Transfer to a closable salvage container and arrange for disposal by the appropriate method or retain for recovery.
Clean-Up Procedures	Wash the spillage site with large amounts of water. Ventilate area to evaporate solvent and dispel vapour. Do not empty into drains.

7 HANDLING AND STORAGE

Handling Precaution	Wear suitable protective clothing, gloves and eye/face protection. Wear a suitable respiratory protection device if the situation demands. Use only under a fume extraction hood or in a fume cupboard. Guard against static discharge.
Storage Precautions	Store in a cool, dry, well ventilated area well away from heat or other sources of ignition. Keep containers tightly closed and away from strong oxidising agents.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protection	Wear suitable protective clothing, gloves and eye/face protection. Wear a suitable respiratory protection device if the situation demands.
Exposure Controls	Methanol: LTEL (8hr TWA) 200 ppm; 266 mg/m ³ (EH40/2005 Ed 2) STEL (15 min.) 250 ppm; 333 mg/m ³ (EH40/2005 Ed 2)



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9 PHYSICAL AND CHEMICAL PROPERTIES

Molecular Formula	n/a		
Appearance and Odour	Liquid usually with perceptible odour.		
Solubility	Completely miscible with water. Miscible with ethanol, benzene, acetone, most organic solvents and diethyl ether.		
Boiling Point	63 °C	Melting Point	n/a
Flash Point	14 °C	Explosion Limits	7.3-36.5 %
Vapour Pressure	100 hPa at 21°C	Density	1.06 g/ml at 20°C
		Autoignition Temp	464 °C

10 STABILITY AND REACTIVITY

Chemical Stability	Stable at normal ambient temperatures. Hygroscopic.
Conditions to Avoid	Reacts violently/explosively with oxidant such as Bromine, sodium hypochlorite, chromium(vi) oxide, nitric acid or hydrogen peroxide. Explosive reaction occurs when sodium is added to a methanol/chloroform mixture. Avoid acid halides, alkali metals, alkaline earth metals, oxidising agents, perchloric acid, perchlorates, salts of oxyhalogenic acids, halogen oxides, nitrogen oxides, nonmetallic oxides, chromosulphuric acid, hydrides, zinc diethyl, halogens. Vapour/air mixtures are explosive.
Incompatible Materials	Various plastics, aluminium, zinc alloys.

11 TOXICOLOGICAL INFORMATION

Health Effects	
On Skin	Liquid irritates and degrades the skin. Prolonged contact with the skin may cause dermatitis.
On Eyes	The vapour and liquid irritate the eyes.
By Inhalation	Inhalation of the vapour will cause dizziness, stupor, cramps and digestive disturbance. Lower concentrations may cause headache, nausea, vomiting and irritation of the mucous membranes.
By Ingestion	Ingestion damages the central nervous system (causing temporary or permanent blindness). Unconsciousness may develop after some hours and this may be followed by death.
Systemic Effects	Acidosis, reduced blood pressure, agitation spasms, narcosis, coma. Symptoms may be delayed. Prolonged absorption can cause liver, kidney and cardiac damage.
Acute Toxicity	Methanol: Oral LD50 (rat) 5628 mg/kg

12 ECOLOGICAL INFORMATION

Ecotoxicity	Harmful effect on aquatic organisms.
Persistence	Readily biodegradable. No bioaccumulation is to be expected.
Appraisal	Do not allow to enter waters, waste water or soil.

13 DISPOSAL CONSIDERATIONS

Waste Disposal	Small volumes may be allowed to evaporate in a safe open area. Larger volumes may be burnt in a chemical incinerator equipped with afterburner and scrubber.
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14 TRANSPORT INFORMATION

ADR/RID-IMDG-ICAO/IATA	UN Number	1992	Class	3/6.1	Packing Group	II
Proper Shipping Name	FLAMMABLE LIQUID, TOXIC, N.O.S. contains methanol					
Specific to ADR/RID	Tunnel Restriction	D/E				
Specific to IMDG	Marine Pollutant	No	EMS	F-E, S-D		

15 REGULATORY INFORMATION

Refer to relevant national legislation that implements provisions relating to the protection of man or the environment.

The information contained in this Safety Data Sheet does not constitute the users own assessment of workplace risk as required by other prevailing health and safety legislation.



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16 OTHER INFORMATION

Full Text of Classification Codes detailed in Section 3

GHS:	Press. Gas	Gasses under pressure
	Flam. Liq. 2	Flammable liquid, Category 2
	Acute Tox. O. 3	Acute Toxicity, Oral, Category 3
	Acute Tox. O. 4	Acute Toxicity, Oral, Category 4
	Acute Tox. D. 3	Acute Toxicity, Dermal, Category 3
	Acute Tox. I. 3	Acute Toxicity, Inhalation, Category 3
	Skin Corr. 1B	Skin corrosion, Category 1B
	Skin Irrit. 2	Skin irritation, Category 2
	Ser. Eye Dmg. 1	Serious eye damage, Category 1
	STOT SE 1	Specific target organ toxicity - single exposure, Category 1
	STOT RE 2	Specific target organ toxicity - repeated exposure, Category 2
	H225	Highly flammable liquid and vapour.
	H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
	H302	Harmful if swallowed.
	H331	Toxic if inhaled.
	H314	Causes severe skin burns and eye damage.
	H315	Causes skin irritation.
	H318	Causes serious eye damage.
	H370	Causes damage to organs.
	H373	May cause damage to organs through prolonged or repeated exposure.
EC:	F: R11	Highly flammable.
	T: R23	Toxic by inhalation.
	T: R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
	R39/23/24/25	Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
	Xn: R22	Harmful if swallowed.
	C : R34	Causes burns.
	Xi: R38	Irritating to skin.
	Xi: R41	Risk of serious damage to eyes.
	Xn: R48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Current Revision 16/08/2015
Update to Regulation (EC) No. 1907/2006

Supersedes 15/03/2012

The information in this Safety Data Sheet is, to the best of the Supplier's knowledge and belief, accurate and reliable as of the date indicated. It provides guidance on health, safety and environmental aspects of the substance/mixture and should not be construed as any guarantee of technical performance or suitability for particular applications. The user is responsible for ensuring that the requirements of relevant legislation are complied with.