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Doc No :	MSDSAPCODR2
Date :	01-04-2026
Type :	AQUASOL DIGITAL
Product Code :	APCODR2

MATERIAL SAFETY DATA SHEET

1 PRODUCT IDENTIFICATION AND INFORMATION

PRODUCT NAME : AQUASOL DIGITAL - COD REFILL SET - APCODR2
Reagent Application Area : Detection of Chemical Oxygen Demand (COD) in water.

2 INFORMATION ON INGREDIENTS AND TOXICITY DATA

Packing : 6 Plastic Bottles of 100ML filled with reagent are packed in protective EPE foam alongwith plastic syringe. This are then packed in Corrogated Box which is shrink wraped.
Performance : Able to estimate chemical oxygen demand in water (Range: – 0 to 1500 ppm).
Ingredient : Reagent contains following chemicals

Chemical Name	Cas No	%
Water	7732-18-5	25 - 27%
Sulphuric Acid	7664-93-9	68 - 70%
Potassium Dicromate	7778-50-9	0 - 1%
Silver Sulfate	10294-26-5	0 - 1%
Mercuric Sulphate	7738-35-9	0 - 1%

3 HAZARDS IDENTIFICATION

Flammable Limits in air,%by Volume : N.A
Flash Point : None
Extinguishing Media : NA as the sol. has water

NFPA / HFR

4 FIRST AID MEASURES

Ingestion (Swallowing): May cause burns of the mouth, May be fatal if swallowed.
Skin Contact : Direct contact can be severely irritating to the skin and may result in redness, swelling, burns and severe skin damage. Direct contact with the liquid or exposure to vapors may cause stinging.
Eye Contact :Tearing, redness, swelling, corneal damage and irreversible eye damage. Splashes in the eyes will cause severe burns. Safety googles should not be worn when working with this chemical.
Inhalation : May cause severe irritation and burns of the nose, throat and respiratory tract.

5 FIRE FIGHTING MEASURES

Since product is not inflammable so no fire fighting measures are not required.

6 ACCIDENTAL RELEASE MEASURES

If liquid is spilled or leaked, ventilate area. Stay upwind and away from spill release. Avoid discharge into drains, water courses or onto the ground. Persons not wearing protective equipment and clothing should be restricted from areas of spills or leaks until cleanup has been completed. Do not discharge into the drains/surface waters/groundwater.

7 HANDLING AND STORAGE

Handling : Wear rubber gloves and safety goggles. Avoid breathing vapors and avoid skin contact. Keep away from direct heat and sunlight.
Storage : Store at room temperature, protected from excessive heat, light. Should Not be refrigerated or frozen.

MATERIAL SAFETY DATA SHEET

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protection:

Required to use splashproof safety goggles where there is any possibility of liquid solutions contacting the eye.: Rubber apron, rubber boots, eyewashstations and safety showers must be available in the immediate work area for emergency use.

Exposure Control:

Chemical Name	Type	Value	Source
Sulphuric Acid	TWA (8 Hours)	1 mg/m³	USA (OSHA)
Potassium Dicromate	TWA (8 Hours)	0.005 mg (Cr)/m³	USA (OSHA)
Mercuric Sulphate	TWA (8 Hours)	2 mg (Hg)/m³	USA (OSHA)

9 PHYSICAL & CHEMICAL PROPERTIES

Appearance: Yellowish Orange liquid
Odor:Odorless
Melting Point: NA
Boiling Point: ND
Observation Time : 14 Days

Solubility:Soluble in Water (Will develope Heat)
pH at 20°C:< 0.5 (Highly Acidic)
Explosion Limit: NA
Flash Point: NA
Exposure Time: 45 Min

10 STABILITY & REACTIVITY

Stable under normal storage conditions. Strong Heating Conditions to be Avoided. Hazardous Decomposition Products Will not occur. Has a corrosive effect. Incompatible with metals.

11 TOXICOLOGICAL INFORMATION

Routes of Exposure: diluted soln. can affect the body if it is inhaled or if it comes in contact with the eyes or skin. It can also affect the body if it is swallowed. Points of Attack.

12 ECOLOGICAL INFORMATION

AQUATIC TOXICOLOGY - No Data Available.
BIODEGRADATION - No Data Available.

13 DISPOSAL CONSIDERATIONS

Avoid release to the environment. Consult state and local regulations for the proper disposal.

14 TRANSPORT INFORMATION (By Air / Sea)

	Land (UN)	Air (IATA)	Sea (IMDG)
UN No	1830	1830	1830
Proper Shipping Name	Sulphuric Acid	Sulphuric Acid	Sulphuric Acid
Class	8	8	8
Packing Group	II	II	II
Environment Hazard	Yes	Yes	Yes
Marine Pollutant	Yes	Yes	Yes

MATERIAL SAFETY DATA SHEET

15 REGULATORY INFORMATION

Consult state and local regulatory authorities.

16 OTHER INFORMATION

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations. Rakiro Biotech assumes no responsibility for injury to customers or third persons caused by the material, if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, since actual use by others is beyond our control, no guarantee expressed or implied is made by Rakiro Biotech as to effect of such use, the results to be obtained, others safety and toxicity of the products, nor Rakiro Biotech assumes any liability arises out of use/misuse by others of the product referred to herein. Information proved herein is provided by Rakiro Biotech solely for customers' assistance in implying with the occupational Safety & Health Act Regulations there under. Any other use is prohibited.