

Material Safety and Data Sheet

I. Chemical Product and Company Identification

Product Name: Clark Cell DO Filling Solution	Manufacturer: Analytical Sensors & Instruments Ltd. 12800 Park One Drive Sugar Land, TX 77478 Telephone: (281)-565-8818; Fax: (281)-565-8811 Email: info@asi-sensors.com	Emergency Contact: INFOTRAC Emergency Response Hotline: 1-800-535-5053 (in the U.S. and Canada) 1-352-323-3500 www.infotrac.net
Catalog No. DO-0001, 0016560	DOT	IATA
Hazardous Shipping Label: Not Currently Regulated	None	

II. Composition, Information on Ingredients

Hazardous Components * Specific Chemical Identity: Common Names	CAS NO.	%	OSHA PEL	ACGIH TLV	LD ₅₀ (mg/Kg)
Glycerol (C ₃ H ₈ O ₃)	56-81-5	20	10 mg/m ³ (mist)	10 mg/m ³ (mist)	12,600 (ORL-RAT)
Potassium Chloride (KCl)**	7447-40-7	8	None Listed	None Listed	2,600 (ORL-RAT)
Trade Secret Component – Non-hazardous	NA	<1	None Listed	None Listed	NA
Deionized Water (H ₂ O)**	7732-18-5	>71	None Listed	None Listed	NA

III. Physical Data

Boiling Point @ 750 mm Hg	NA	Freezing Point	NA
pH 25 @ °C	6.0 – 8.0	Vapor Pressure @ 25 °C	NA
Volatiles % By Wt.	NA	Solubility in water, % by Wt@ 25 °C	Miscible
Vapor Density (Air=1)	NA	Evaporation Rate (butyl, Acetate=1)	NA
Specific Gravity (Water=1)	NA	Odor	Odorless
Appearance	Clear, colorless liquid		

IV. Fire And Explosion Hazard Data

Flash Point	NA		
Extinguishing Media	Water, CO ₂ , Dry Chemical, or appropriate foam		
Fire and Explosion Hazards	Specific Hazard(s): Emits toxic fumes under fire conditions.		
Fire Fighting Instructions/Equipment	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.		
Unusual Fire & Explosion Hazards	Specific Hazard(s): Emits toxic fumes under fire conditions.		
Auto-ignition Temperature	NA		
Lower	NA	Upper	NA

V. Reactivity Data

Stability	Unstable	Stable X
Condition to Avoid	Heating to Decomposition	
Incompatibility (Material to avoid)	Heating to Decomposition	
Hazardous Decomposition Products	Heating to decomposition releases toxic and/or corrosive fumes of: acrolein carbon dioxide carbon monoxide chlorides	
Hazardous Polymerization	Will not occur	

VI. Health Hazard Data

Routes of Entry	<i>Inhalation</i> Yes	<i>Skin</i> Yes	<i>Ingestion</i> Yes
Health Hazards	Acute	Pre-existing: Eye and Skin Conditions. Chronic overexposure may cause Kidney damage	
	Chronic		
Carcinogenicity	<i>NTP</i> No	<i>IARC Monographs</i> No	<i>OSHA Regulated</i> No
Signs and Symptoms of Exposure	May cause irritations to eyes, skin, mucous membranes or digestive tract. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.		
Medical Conditions Generally Aggravated by Exposure	May cause eye irritation, may be harmful or cause irritation if swallowed, inhaled, or allowed to come in contact with the skin.		
Emergency And First Aid Procedures	Eye Contact: Immediately flush eyes with copious amounts of water, separate eyelid from eye. Call physician if irritation develops. Skin Contact: Wash effected area with soap and copious amounts of water. Call physician if irritation develops. Ingestion: Wash out mouth if person is conscious. Give 1 to 2 glasses of water. Call physician if you feel unwell. Inhalation: Remove to fresh air, if not breathing give artificial respiration, if breathing is difficult give oxygen. Call physician.		

VII. Precautions for Safe Handling and Use

Steps to be Taken In Case Material is Released or Spilled	Absorb spill on sand or vermiculite. Sweep up and hold in approved container for waste disposal. Ventilate area after cleanup; take precautions not to raise dust or particulates.
Waste Disposal Method	Dispose of in accordance with all federal, state and local laws and ordinances.
Precautions To Be Taken In Handling and Storing	NFPA Rating: Scale (0-4): Health – 1, Fire – 0, Reactivity – 0, Specific – None.
Other Precautions	Keep containers tightly closed. Take precautions to avoid contact with skin, eyes, clothes, and prevent inhalation. Avoid oxidizers.

VIII. Control Measures

Respiratory Protection (specific type)	Wear appropriate governmental approved respirator	
Ventilation	<i>Local Exhaust</i> If needed	<i>Special</i> Safety shower and eye wash station
	<i>Mechanical (General)</i> Mechanical exhaust required	<i>Other</i> None
Protective Gloves Protective Not Required	Eye Protection Other Required chemical resistant approved gloves	Clothing or Equipment Protective laboratory clothing, protective gloves, protective safety goggles, and approved appropriate respirator. Safety shower, eye wash station, and mechanical ventilation.
Work/Hygienic Practices	No eating or drinking in work area. Wash hands after working with this product.	

XVI. Additional Information

Issue Date: 05/09

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Document: 0016560

* N/A – Not Applicable/Not Available

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