

OFI TESTING EQUIPMENT, INC.
MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT AND COMPANY IDENTIFICATION	
Chemical Name:	Hexadecyltrimethylammonium Bromide Powder
Trade Name:	QAS Powder
OFI Part No.	285-32-01
Chemical Family:	CetrimoniumBromide;Cetyltrimethylammoniumbromide;Cetab;Centimide
Formula:	CH ₃ (CH ₂) ₁₅ N(CH ₃) ₃ Br
Manufacturer:	OFI Testing Equipment, Inc. 11302 Steeplecrest Drive Houston, TX 77065 USA Phone: (713) 880-9885
In Case of Emergency Spills, Leaks, Fire, Exposure or Accident:	In the USA, call INFOTRAC at 1-800-535-5053 day or night Outside the USA, call collect, (352) 323-3500
SECTION II - HAZARD IDENTIFICATION	
CAS #:	CHEMICAL NAME
57-09-0	Hexadecyltrimethylammonium Bromide 100%
SECTION III - COMPOSITION / INFORMATION ON INGREDIENTS	
Emergency Overview:	Warning! Harmful If Swallowed, Inhaled Or Absorbed Through Skin. Causes Severe Irritation To Eyes, Skin And Respiratory Tract.
Inhalation:	Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.
Ingestion:	Toxic. Harmful if swallowed. Causes irritation to the gastrointestinal tract. Symptoms may include nausea, vomiting and diarrhea.
Skin:	Causes irritation to skin. Symptoms include redness, itching, and pain. May be absorbed through the skin with possible systemic effects.
Eye Contact:	Causes irritation, redness, and pain.
Chronic Exposure:	No information found.
Aggravated by Exposure:	No information found.
SECTION IV - FIRST AID MEASURES	
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
Skin:	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
Eyes:	Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention.
SECTION V - FIRE FIGHTING MEASURES	
Fire:	Not Considered to be a Fire Hazard. Flash point: 244C (471 ⁰ F) CC Flammable limits in air % by volume: Iel: 0.4 Gives off highly toxic and irritating fumes.
Explosion:	Not considered to be an explosion hazard.
Fire Extinguishing Media:	Use any means suitable for extinguishing surrounding fire.
Special Information:	In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION VI - ACCIDENTAL RELEASE MEASURES	
	Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.
SECTION VII - HANDLING AND STORAGE	
	Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.
SECTION VIII - EXPOSURE CONTROL / PERSONAL PROTECTION	
Airborne Exposure Limits:	None established.
Ventilation System:	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.
Personal Respirators: (NIOSH APPROVED)	For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. Warning: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection:	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Eye Protection:	Use Chemical Safety Goggles and/or full-face shield where dusting or splashing of solutions is possible. Maintain Eye Wash Fountain and Quick-Drench Facilities in Work Area.
SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES	
Appearance / Odor:	White Powder
Solubility:	Soluble in water.
Specific Gravity:	No Information Found.
pH:	No Information Found.
% Volatiles by Vol.	0 @ 21 ^o C (70 ^o F):
Melting Point:	237 - 243 ^o C (459 - 469 ^o F)
Boiling Point:	235 ^o C (455 ^o F)
Vapor Density (Air=1):	13
Vapor Pressure (mmHg):	No Information Found.
Evaporation Rate (BuAc=1):	No Information Found.
SECTION X - STABILITY AND REACTIVITY	
General Reactivity:	Stable under ordinary conditions of use and storage. Hygroscopic powder.
Hazardous Decomposition:	Nitrogen oxides, oxides of carbon as well as ionic or oxidized halogen.
Incompatibilities:	Strong oxidizing agents.
Hazardous Polymerization:	Will Not Occur.
SECTION XI - TOXICOLOGICAL INFORMATION	
Carcinogenic	Oral rat LD50: 410 mg/Kg
References:	Irritant, standard Draize, eye rabbit: 450 mg = severe
	Investigated as a reproductive effector.
	-----\Cancer Lists\-----
	---NTP Carcinogen---
	Ingredient Known Anticipated IARC Category

	Hexadecyltrimethylammonium Bromide No No None
	(57-09-0)

SECTION XII - ECOLOGICAL INFORMATION	
Environmental Fate:	No information found.
Environmental Toxicity:	No information found.
SECTION XIII - DISPOSAL CONSIDERATIONS	
Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.	
SECTION XIV - TRANSPORT INFORMATION	
Hazard Class:	Not Regulated
Identification No.:	Not Regulated
SECTION XV - REGULATORY INFORMATION	
Chemical Inventory Status – Part 1:	Ingredient Hexadecyltrimethylammonium Bromide (57-09-0)
	TSCA EC Japan Australia Yes Yes Yes Yes
Chemical Inventory Status – Part 2:	Ingredient Hexadecyltrimethylammonium Bromide (57-09-0)
	--Canada-- Korea DSL NDSL Phil. Yes Yes No Yes
Federal, State & International Regulations – Part 1:	Ingredient Hexadecyltrimethylammonium Bromide (57-09-0)
	-SARA 302- RQ TPQ -----SARA 313----- No No No No List Chemical Catg.
Federal, State & International Regulations – Part 2:	Ingredient Hexadecyltrimethylammonium Bromide (57-09-0)
	CERCLA 261.33 -RCRA- -TSCA- No No 8(d) No
Chemical Weapons Convention:	No
TSCA 12 (b):	No
CDTA:	No
SARA 311/312:	Acute: Yes Chronic: No Fire: No Pressure: No Reactivity: No (Pure / Solid)
Australian Hazchem Code:	None allocated.
Poison Schedule:	None allocated.
WHMIS	This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.
SECTION XVI - OTHER INFORMATION	
NFPA Rating:	HEALTH-2, FLAMMABILITY-1, REACTIVITY-1
Disclaimer:	The information contained herein is based upon data believed to be reliable and reflects our best professional judgment. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein and assume no responsibility regarding the suitability of this information for the user's intended purpose or for the consequence of its use. Each individual should make a determination as to the suitability of the information for his/her particular purpose(s).