

BioLogic Chemical Works

MATERIAL SAFETY DATA SHEET

MFG.CODE # 28

SECTION I

MANUFACTURER'S NAME BioLogic Chemical Works		EMERGENCY TELEPHONE NO. (248)941-0347
ADDRESS (Street, City, State and Zip Code) P. O. BOX 82501, Rochester, MI 48308		
CHEMICAL NAME AND SYNONYMS n/a	TRADE NAME AND SYNONYMS BioOrange	
CHEMICAL FAMILY n/a	FORMULA n/a	

SECTION II – HAZARDOUS INGREDIENTS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (UNITS)
Sodium Metasilicate (CAS# 6834-92-0)	>1	N/A
Trisodium Phosphate (CAS# 7601-54-9)	>1	N/A
Dipropylene Glycol Methyl Ether (CAS# 34590-94-8)	>1	100 ppm
Coconut Oil Soap (CAS# 61789-31-9)	>1	N/A
Non-Ionic Surfactant (CAS# 68131-40-8)	>1	N/A
D-Limonene (CAS#5989-27-5)	>1	Not est.
All components of this product are listed on the E.P.A./TSCA inventory of chemical substances		

SECTION III – PHYSICAL DATA

BOILING POINT (°F)	212	SPECIFIC GRAVITY (H2O = 1)	1.05
VAPOR PRESSURE (mm. Hg.)	0.88	PERCENT VOLATILE BY VOLUME (%)	85
VAPOR DENSITY (AIR = 1)	N/A	EVAPORATION RATE (=1) n-Butyl Acetate	1
SOLUBILITY IN WATER	Complete	PH concentrate 10 to 1 dilution	13.0 11.9
APPEARANCE AND ODOR Clear purple liquid with mild sweetish odor.			

SECTION IV – FIRE AND EXPLOSION DATA

FLASH POINT (Method Used) None	FLAMMABLE LIMITS	Lel N/A	Uel N/A
EXTINGUISHING MEDIA Use media suitable for surrounding fire.			
SPECIAL FIRE FIGHTING PROCEDURES Fire fighters should wear full protective clothing including self-contained respiratory equipment operated in a positive mode.			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

(Continued on reverse side)

SECTION V – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE 100 ppm	PRIMARY ROUTES OF ENTRY Inhalation <input checked="" type="checkbox"/> Skin Contact <input checked="" type="checkbox"/> Other (Specify)
EFFECTS OF OVEREXPOSURE Eyes- severe irritation, blurred vision. Skin – defatting, irritation, dermatitis. Inhalation – of spray mist may cause respiratory irritation. Ingestion – nausea, vomiting, diarrhea.	
EMERGENCY AND FIRST AID PROCEDURE Eyes – flush with copious amounts of water, lifting lids and removing contact lenses to insure complete irrigation – get medical attention Skin – flush with water and then wash with soap and waer, launder contaminated clothing before reuse – get medical attention if irritation persists. Inhalation – remove to fresh air and assist breathing as necessary – get medical attention. Ingestion – give acidic beverages (orange or tomato juices or carbonate soft drinks) – get medical attention immediately.	
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None known	
Carcinogen: NO	NTP IARC OTHER

SECTION VI – REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID Freezing
	STABLE	x	
INCOMPATIBILITY (Conditions to avoid) Oxides of carbon			
HAZARDOUS DECOMPOSITION PRODUCTS Polymerization			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID None
	WILL NOT OCCUR	x	

SECTION VII – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Use absorbent material to soak up spill. Shovel or sweep into container for disposal. Flush spill area with water.
WASTE DISPOSAL METHOD In accordance with all Local, State and Federal Regulations.

SECTION VIII – SPECIAL PROTECTION INFORMATION

SPECIAL RESPIRATORY PROTECTION (Specify type) Not normally required		
VENTILATION	LOCAL EXHAUST Normal Ventilation adequate.	SPECIAL N/A
	MECHANICAL (General) Normal Ventilation adequate.	OTHER N/A
PROTECTIVE GLOVES Impervious	EYE PROTECTION Chemical goggles	
OTHER PROTECTIVE EQUIPMENT Eyewash and safety shower		

SECTION IX – SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Avoid contact – wer protective clothing and wash thoroughly after using. Avoid inhalation of spray mists. Do not take internally. Avoid Freezing.
OTHER PRECAUTIONS Keep out of reach of children.

HMIS SYMBOL

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0

HMIS NFPA

NFPA SYMBOL

SEVERE 4 EXTREME		REACTIVITY
SERIOUS 3 HIGH		
MODERATE 2 MODERATE		
SLIGHT 1 SLIGHT		
MINIMAL 0 INSIGNIFICANT		SPECIAL

NAME	John Petoskey
SIGNATURE	
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