

Safety Data Sheet

Quip makes it safe. Simply and Sensibly.

Creation Date: 24-Jan-2013

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Revision Number: Rev 2

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

1.1. Product identifier

Product Description: MB-10 TABLETS (1.5 Gram Size)

Product ID:MBTAB1.5Common Name:Chemical MixtureChemical Name:Chemical MixtureFormula:Chemical Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended UseBiocide / CleanserUses advised againstNot Available

1.3. Details of the supplier of the safety data sheet

Quip Laboratories, Inc.

1500 Eastlawn Avenue Wilmington, DE 19802 thidell@quiplabs.com

E-mail address

Company

1.4. Emergency telephone number

For information US call: 001-302-761-2600 Emergency Number CHEMTREC Tel. No.US:001-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture



Classification

Skin Irritation/Corrosion:	Category 1C
Acute Toxicity/Dermal	Category 3
Acute Toxicity, Oral:	Category 4
Hazardous to the Aquatic Env., Acute Tox:	Category 1
Hazardous to the Aquatic Env., Chronic Tox:	Category 1
Oxidizing Solid	Category 1

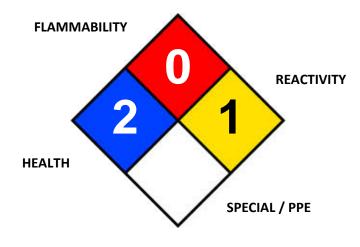
2.2. Label elements

Hazard Statements

H314	 Causes severe skin burns and eye damage.
H311	- Toxic in contact with skin.
H302	- Harmful if swallowed.
H400	- Very toxic to aquatic life.
H410	- Very toxic to aquatic life with long lasting effects.
H271	 May cause fire or explosion; strong oxidizer.
EUH029	- Contact with water liberates toxic gas.
Precautionary Stateme	ents
P280	- Wear protective gloves/protective clothing/eye protection/face protection.
P273	- Avoid release to the environment.
P210	 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P280f + P283	 Wear protective gloves and eye/face protection and fire/flame
	resistant/retardant clothing.
P260g	- Do not breathe dust or mist.
P220	 Keep/Store away from clothing/combustible materials.
P221	 Take any precaution to avoid mixing with combustibles.
P264	 Wash with plenty of water and soap thoroughly after handling.

Produc	t ID: MBTAB1.5	
	P270	- Do not eat, drink or smoke when using this product.
	P312	- Call a POISON CENTER or doctor/physician if you feel unwell.
	P303+P361+P3	52 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
		Wash with plenty of soap and water.
	P304 + P340	- IF INHALED: Remove victim to fresh air and keep at rest in a position
		comfortable for breathing.
	P303 + P352	- IF ON SKIN (on hair): Wash with plenty of soap and water.
	P301 + P330	- IF SWALLOWED: rinse mouth.
	P305+351+338	- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
		Lenses if present and easy to do – continue rinsing.
	P306 + P360	- IF ON CLOTHING: rinse immediately contaminated clothing and skin with
		Plenty of water before removing clothes.
	P370 + P378.8	- In case of fire: Use copious quantities of water for extinction.
	P371+P380+P3	75 In case of major fire and large quantities: Evacuate area. Fight fire remotely
		due to the risk of explosion.
	P405	- Store locked up.
	P420	- Store away from other materials.
	P501	- Dispose of contents/container to hazardous or special waste collection point.
S-phra	se(s)	
	S7/8	- Keep container tightly closed and dry.
	S1/2	- Keep locked up and out of reach of children.
	S22	- Do not breathe dust.
	S26	 In case of contact with eyes, rinse immediately with plenty of water and seek
		Medical advice.
	S29	- Do not empty into drains.
	S36/37/39	 Wear suitable protective clothing, gloves and eye/face protection.
	S45	- In case of accident or if you feel unwell, seek medical advice immediately
		(show the label where possible).
	S51	- Use onlu in well ventilated areas.
	S61	- Avoid release to the environment. Refer to special instructions/safety data
		Sheets.
	•	67/548/EEC or 1999/45/EC
Possib	le Hazards:	Contact with acids liberates very toxic chlorine dioxide gas.
		Contact with water liberates toxic gas.
		Explosive when mixed with combustible material.
		Harmful in contact with skin and if swallowed.
		Causes burns.
		Very toxic to aquatic organisms, may cuase long-term adverse effects in the
		Aquatic environment. Further possible risks to man and the environment,
		Eg as a result of decomposition and/or reaction products, are to be taken from
		The corresponding sections of tis safety data sheet.

2.3. Other hazards



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS No.
Sodium Chlorite	15 - 24	7758-19-2
Inorganic Salts	60 - 80	Proprietary
Sodium Dichloroisocyanurate	5 - 10	51580-86-0
dihydrate		

Reach Registration Number --

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
Ingestion	Do not induce vomiting. Obtain medical attention.

MB-10 Tablets (1.5 Gram) Product ID: MBTAB1.5 Inhalation Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention. **Protection of First-aiders** Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination

4.2. Most important symptoms and effects, both acute and delayed

No information available

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media 5.1.

Suitable Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons:

No information available.

5.2. Special hazards arising from the substance or mixture

No information available.

Hazardous Combustion Products:

Carbon monoxide (CO), Carbon dioxide (CO2).

Advice for firefighters 5.3.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Collect spillage and collect in suitable container for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STOARGE

7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Use in industrial applications

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s):

Biological limit values:

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Component	STD	TWA	STEL	Notes
Sodium Chlorite	WEL		1 mg/m ³	

WEL = Workplace Exposure Limit

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Ingredient Comments STEL = Short Term Exposure TWA = Time Weighted Average

8.2. Exposure controls

Hygiene Measures: Engineering Measures: Handle in accordance with good industrial hygiene and safety practice Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas

Personal protective equipment



Eye Protection:	Safety glasses with side-shields or face shield
Hand Protection:	Protective gloves. Polyvinyl chloride (PVC)
Skin and body protection:	Wear appropriate protective gloves and clothing to prevent skin
	exposure
Respiratory Protection:	Follow the OSHA respirator regulations found in 29 CFR
	1910.134 or European Standard EN 149. Use a NIOSH/MSHA or
	European Standard EN 149 approved respirator if exposure
	limits are exceeded or if irritation or other symptoms are
	experienced
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety
	practice
Environmental exposure controls :	No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERITES

9.1. Information on basic physical and chemical properties

Appearance	Clear
Physical State	Liquid
Odor	Mild Odor
Odor Threshold	No data available
pH (10% soln.)	6.0 - 7.0
Melting Point/Range	No data available
Softening Point	No data available
Boiling Point/Range	Greater than 220°F
Flash Point	No data available
Evaporation Rate	No information available
Flammability (solid,gas)	No information available.
Explosion Limits	No data available.
Vapor Pressure	No data available
Vapor Density	Not applicable
Specific Gravity / Density	No data available
Bulk Density	No data available
Water Solubility	Soluble
Solubility in other solvents	No information available.
Partition Coefficient (n- octanol/water)	No data available
Autoignition Temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive Properties Oxidizing Properties	No data available

9.2. Other information

Molecular Formula	
Molecular Weight	

Not Available Not Availabl

SECTION 10: STABILITY AND REACTIVITY

10.1. Chemical stability

Stable under normal conditions.

10.2. Possibility of hazardous reactions

MB-10 Tablets (1.5 Gram) Product ID: MBTAB1.5

Hazardous Polymerization: Hazardous Reactions:

10.3. Materials to avoid

Hazardous polymerization does not occur. None under normal processing.

Chlorine containing compounds

10.4. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.5. Hazardous decomposition products

None known

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) acute toxicity;

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Sodium Chlorite	165 mg/kg (Rat)		
Inorganic Salt	2800 mg/kg (Rat)		
Sodium	1420 mg/kg (Rat)		
Dichloroisocyanurate			
Dihydrate			

- (b) skin corrosion/irritation; Causes severe skin burns and eye damage
- (c) serious eye damage/irritation; Causes serious eye damage
- (d) respiratory or skin sensitization;

	Respiratory	Based on available data, the classification criteria are not met
	Skin	Based on available data, the classification criteria are not met
(e)	germ cell mutagenicity;	Based on available data, the classification criteria are not met
(f)	carcinogenicity;	Based on available data, the classification criteria are not met
		There are no known carcinogenic chemicals in this product
(g)	reproductive toxicity;	Based on available data, the classification criteria are not met
(h)	STOT-single exposure;	Based on available data, the classification criteria are not met
(i)	STOT-repeated exposure;	Based on available data, the classification criteria are not met
	Target Organs	Skin, Respiratory system, Eyes
(j)	aspiration hazard;	Not applicable

Other Adverse EffectsSee actual entry in RTECS for complete information The
toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed

Causes serious eye damage

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity effects

Component	Freshwater Fish	Gambusia Affinis	Freshwater Algae	Microtox
Sodium Chlorite	Daphnia Magna:			
	LC50 > 0.29			
	mg/L/48h			

12.2. Persistence and degradability	Product is biodegradable
Persistence:	Soluble in water, Persistence is unlikely, based on
	information available.
12.3. Bioaccumulative potential	Bioaccumulation is unlikely
<u>12.4. Mobility in soil</u>	The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.
12.5. Results of PBT and vPvB assessme	ent Substance is not considered persistent, bioaccumulative And toxic (PBT) / very persistent and very Bioaccumulative (vPvB).
12.6. Other adverse effects	
•	his product does not contain any known or suspected ndocrine disruptors
-	his product does not contain any known or suspected ubstance
·	his product does not contain any known or suspected ubstance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Federal, state and local disposal laws and regulations will determine the proper waste disposal/recycling/reclamation/treatment procedure. Disposal requirements are dependent on the hazard classification and will vary by location and the type of disposal selected. All waste materials should be reviewed to determine the applicable hazards (testing may be necessary).

SECTION 14: TRANSPORT INFORMATION

<u>14.1.</u> <u>14.2.</u> <u>14.3.</u> 14.4.	UN number: Proper shipping name: Transport hazard class(es): Packing group:	UN3085 OXIDIZING SOLID, CORROSIVE, N.O.S. (contains sodium chlorite) Class 5.1: Oxidizing Substance
<u>14.5.</u> 14.6.	Environmental hazards Special precautions for user	Environmentally Hazardous Substance/Marine Pollutant EMS: F-A, S-B Tunnel Restriction Code: (E)
14.7. Transport in bulk according Not applicable, packaged goods to Annex II of MARPOL73/78 and the IBC Code		

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

US FEDERAL REGULATIONS:

TSCA: In TSCA (Toxic Substances Control Act)

SARA 311 and 312 HAZARD CATEGORIES:

Immediate (Acute): YesDelayed (Chronic): NoFire: NoReactivity: NoSudden Release of Pressure: No

SARA SECTION 313 NOTIFICATION:

This product does not contain toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

CAA 602 OZONE DEPLETING SUBSTANCES (ODS):

This product neither contains nor is manufactured with an ozone depleting substance subject to the labeling requirements of the Clean Air Act Amendments 1990 and 40 CFR Part 82.

VOLATILE ORGANIC COMPOUNDS (VOC): Not Applicable.

US STATE REGULATIONS:

VOLATILE ORGANIC COMPOUNDS (CARB): Not Applicable.

CANADIAN REGULATIONS:N/ADSL/NDSL:N/AWHMIS CLASSIFICATION:N/A

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work.

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been completed.

SECTION 16: OTHER INFORMATION

Full text of R-phrases referred to under sections 2 and 3

R36 - Irritating to eyes

Full text of H-Statements referred to under sections 2 and 3

H319 - Causes serious eye irritation

Legend

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified

Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Existing and Evaluated Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japan Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

NZIOC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

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ACGIH - American Conference of Industrial Hygiene **DNEL - Derived No Effect Level** TWA - Time Weighted Average IARC - International Agency for Research on Cancer **PNEC - Predicted No Effect Concentration RPE - Respiratory Protective Equipment** LD50 - Lethal Dose 50% LC50 - Lethal Concentration 50% **NOEC - No Observed Effect Concentration** PBT - Persistent, Bioaccumulative, Toxic EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships OECD - Organisation for Economic Co-operation and Development ATE - Acute Toxicity Estimate **BCF** - Bioconcentration factor **VOC - Volatile Organic Compounds**

Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

The information in this Safety Data Sheet should be provided to all who use, handle, transport, or otherwise are exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and persons working with or handling this product. The information presented in this SDS is premised upon proper handling and anticipated uses, and is for the material without chemical additions/alterations. Additionally, if this Safety Data Sheet is more than

three years old, please contact this supplier at the phone number above Section 1 to make sure this sheet is current.

PREPARED BY: T. Hidell

DATE: 2/13/2018 Supercedes: 3/14/2015

The information and recommendations contained herein are based upon data believed to be correct. No warranty, expressed or implied, is made.