



Safety Data Sheet

Quip makes it safe. Simply and Sensibly.

Creation Date: 24-Jan-2013

Revision Date: 11-Nov-2020

Revision Number: Rev 7

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

1.1. Product identifier

Product Description: MB-10 TABLETS (6.0 Gram Size)

Product ID: MBTAB6
Common Name: Chemical Mixture
Chemical Name: Chemical Mixture
Formula: Chemical Mixture

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

Recommended Use Biocide
Uses advised against Not Available

1.3. Details of the supplier of the safety data sheet

Company Quip Laboratories, Inc.
1500 Eastlawn Avenue
Wilmington, DE 19802
E-mail address thidell@quiplabs.com

1.4. Emergency telephone number

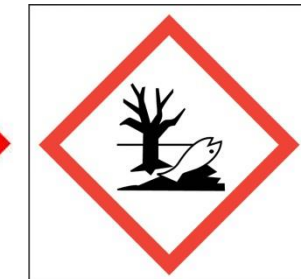
For information US call: 001-302-761-2600
Emergency Number CHEMTREC Tel. No.US:001-800-424-9300

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture



Signal Word



Danger

Classification:

Skin Irritation/Corrosion:	Category 1C
Acute Toxicity/Dermal	Category 3
Acute Toxicity, Oral:	Category 4
Acute Toxicity, Inhalation-Dust:	Category 3
Hazardous to the Aquatic Env., Acute Tox:	Category 1
Eye Damage/Irritation:	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.
- H331 - Toxic if inhaled.

Precautionary Statements

- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P271 - Use only outdoors or in a well-ventilated area.
- 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.
- P260 - 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.

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- P270 - Do not eat, drink or smoke when using this product.
- P312 - Call a POISON CENTER or doctor/physician if you feel unwell.
- P310 - Immediately call a POISON CENTER or doctor/physician.
- P303+P361+P352 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. Do not induce vomiting.
- 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+P375 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.
- P391 - Collect spillage.
- P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
- P405 - Store locked up.
- P501 - Dispose of contents/container to hazardous or special waste collection point.

2.3. Other hazards

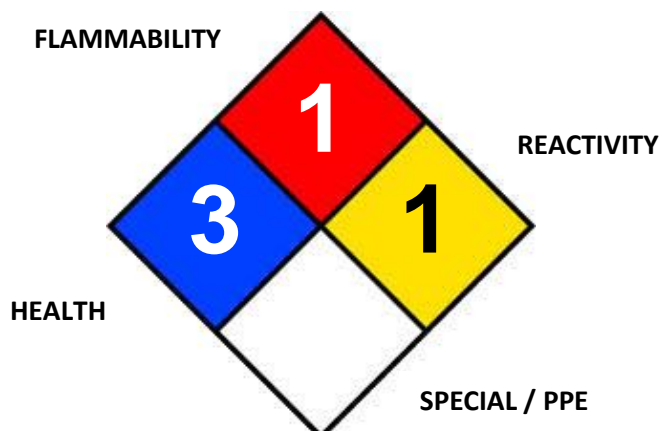
If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 56 % dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 8 % oral

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 77 % Inhalation - dust



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS No.
Chlorous acid, sodium salt	20 - 25	7758-19-2
Sodium Hydrogen Sulphate	25 - 50	7681-38-1
Sodium Hydroxide	0 – 0.3	1310-73-2
1,3,5-Triazine-2,4,6(1H,3H,5H)-trion, 1,3-dichlorosodium salt, dihydrate	7 - 10	51580-86-0

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.

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

5.1. Extinguishing media

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).

5.3. Advice for firefighters

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 STORAGE

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

WEL = Workplace Exposure Limit

Ingredient Comments

STEL = Short Term Exposure

TWA = Time Weighted Average

8.2. Exposure controls

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice

Engineering Measures: 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 PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	White tablets
Physical State	Solid
Odor	Slight Odor, of chlorine
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	Hydrolyzes. The product has not been tested.
Evaporation Rate	Not applicable
Flammability (solid,gas)	No information available.
Explosion Limits	No data available.
Vapor Pressure	Negligible
Vapor Density	Not applicable
Specific Gravity / Density	No data available
Bulk Density	0.8 – 1.5 g/cm ³
Water Solubility	Reacts with water
Solubility in other solvents	No information available.
Partition Coefficient (n- octanol/water)	The substance /product decomposes therefore not determined
Autoignition Temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive Properties Oxidizing Properties	No data available
Melting Range	120 – 190°C The substance / product decomposes.
Thermal Decomposition	190°C Chlorine oxide (ClO ₂)
Information on: Chlorine oxide (ClO₂)	
Lower explosion limit:	10%(V) (20°C, 1013.25 hPa) Literature data

9.2. Other information

Molecular Formula	Not Available
Molecular Weight	Not Available

SECTION 10: STABILITY AND REACTIVITY

10.1. Chemical stability

Reactivity

Oxidizing properties:

Oxidizing. (UN Test O.1 (oxidizing solids))

Reactions with water/air

Toxic gases: yes

Peroxides: no

Formation of flammable gases:

Remarks: Forms no flammable gases in
The presence of water

Chemical Stability

The product is stable if stored and handled as prescribed/indicated.

10.2. Possibility of hazardous reactions

Hazardous Polymerization:

Hazardous polymerization does not occur.

Hazardous Reactions:

None under normal processing.

10.3. Materials to avoid

Chlorine containing compounds

10.4. Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

10.5. Hazardous decomposition products

Decomposition products: Oxygen, chlorine

Thermal decomposition: 190°C

Possible thermal

decomposition products: Chlorine oxide (ClO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact.

Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Of moderate toxicity after single ingestion. Of pronounced toxicity after short-term skin contact.

Oral

Type of value: LD50 Species: rat Value: > 500 mg/kg
The value meets the highest applied test concentration.

Inhalation

The product has not been tested.

Dermal

Type of value: LD50 Species: rat Value: 400 - 1,000 mg/kg
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Irritation / corrosion

Assessment of irritating effects: Corrosive! Damages skin and eyes.

Skin

Species: rabbit Result: Corrosive. Method: Primary skin irritation test
The substance was tested in olive oil. The statement for skin irritation was derived from products of similar composition.

Eye

Species: rabbit Result: non-irritant
An aqueous solution was tested.

Sensitization

Buehler test Species: guinea pig Result: Non-sensitizing.
An aqueous solution was tested.

Aspiration Hazard

No data available.

Chronic Toxicity/Effects

Genetic toxicity

Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The data on toxicology refer to the active ingredient.

Information on: Chlorous acid, sodium salt

Assessment of mutagenicity: The substance was mutagenic in a bacterial test system. The substance was not mutagenic in a test with mammals.

Other Information

This substance can lead to the formation of other substances. The toxic properties of the subsequent products should be considered.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Very toxic (acute effect) to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components. The hydrolysis products are not acutely harmful to aquatic organisms.

Ecotoxicity effects

Component	Brachydanio rerio	Cyprinodon variegatus	Daphnia magna	Daphnia magna (static)
Chlorous acid, sodium salt	LC50 > 100 mg/l	LC50 > 105 mg/l (96h)	LC50 > 0.063 mg/l	EC50 > 0.75 mg/l (48h)

12.2. Persistence and degradability

Persistence:

Inorganic product which cannot be eliminated from water by biological purification processes. The product has not been tested. The statement has been derived from the properties of the individual components. The

product contains (a) poorly biodegradable component(s). The product is unstable in water. The elimination data also refer to products of hydrolysis. Well eliminable from water by adsorption on activated sludge.

Information on Stability in Water (Hydrolysis)

Information on: Chlorous acid, sodium salt

In contact with water the substance will hydrolyse rapidly/

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

Endocrine Disruptor Information No data available.

Persistent Organic Pollutant No data available.

Ozone Depletion Potential No data available.

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.S. Land Transport

- 14.1. UN number:** UN3131
- 14.2. Proper shipping name:** Water Reactive Solid, Corrosive, N.O.S. (contains sodium chlorite, troclosen sodium, dihydrate)
- 14.3. Transport hazard class(es):** Class 4.3 (8)
- 14.4. Packing group:** III

International Transport

- 14.1. UN number:** UN1759
- 14.2. Proper shipping name:** Corrosive Solid, N.O.S. (contains sodium chlorite, troclosen sodium, dihydrate)
- 14.3. Transport hazard class(es):** (8)
- 14.4. Packing group:** III
- 14.5. Environmental hazards** Environmentally Hazardous Substance/Marine Pollutant
- 14.6. Special precautions for user** EMS: F-A, S-B Tunnel Restriction Code: (E)
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION

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

US FEDERAL REGULATIONS:

Registration Status: Biocide

TSCA: TSCA (Toxic Substances Control Act) Released / Exempt

SARA 311 and 312 HAZARD CATEGORIES:

Refer to SDS section 2 for GHS hazard classes applicable for this product.

US STATE REGULATIONS:

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
NJ	7681-38-1	sodium hydrogen sulphate
	7758-19-2	Chlorous acid, sodium salt
	51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt, dihydrate
PA	7758-19-2	Chlorous acid, sodium salt
	51580-86-0	1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, 1,3-dichloro-, sodium salt, dihydrate

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

Based on Quip Lab's knowledge of the product composition and manufacturing process, exposure to this product is not expected to contain substances subject to prior warning under California Proposition 65 regulations. Since Quip Labs does not expect California Proposition 65 listed substances to be present, we do not routinely analyze this product for these substances.

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

MB-10 Tablets (6.0 Gram)
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ENCS - Japan Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
WEL - Workplace Exposure Limit
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.

MB-10 Tablets (6.0 Gram)
Product ID: MBTAB6

SAFETY DATA SHEET

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: 11/11/2020

Supersedes: 10/28/2020

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