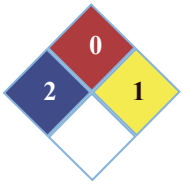
PRODUCT

MATERIAL SAFETY DATA SHEET

MERAS ENGINEERING

MERAS Micro Blast 3

601 Van Ness Ave. #E3-725, San Francisco, CA. 94102
ph.866.899.9762



CONTACT:
ChemTrec 800-424-9300

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Micro Blast 3
PRODUCT USE:	Water treatment chemical, reaction catalyst. (Part three of the three component Micro Blast system)
COMMON CHEMICAL NAME:	Hypochlorite solution sodium salt, sodium hypochlorite
MANUFACTURER:	Meras Engineering 601 Van Ness Ave #E3-725 San Francisco, CA 94102
PRODUCT INFORMATION:	1-866-899-9762 (outside the U.S. 1-415-240-4918)
TRANSPORT EMERGENCY:	CHEMTREC: 1-800-424-9300 (outside the U.S. 1-703-527-3887)
OTHER INFORMATION:	professional use

SECTION 2. HAZARDS IDENTIFICATION

POTENTIAL ROUTE [S] OF ENTRY

INHALATION [BREATHING]:	Unlikely to occur. Vapor may cause irritation to upper respiratory tract.
DERMAL [SKIN]:	Contact with broken skin may cause burning, blistering, and tissue destruction if not washed off immediately.
EYES:	Corrosive to eyes.
INGESTION:	Not anticipated. May cause severe chemical burns to esophagus and to stomach lining.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No.	Concentration
Sodium hypochlorite	7681-52-9	7.5 – 15%
Water	7732-18-5	91.5 - 75 %
Proprietary Blend		1 – 10%

SECTION 4. FIRST AID MEASURES

FIRST AID

EYE CONTACT:	Flush with water. Remove contact lenses [if applicable]. Hold eyelids open. Continue flushing with water for 15 minutes. Get prompt medical attention.
SKIN CONTACT:	Wash affected area with water for 15 minutes. Get medical attention.
INGESTION [SWALLOWING]:	Drink large quantities of water. DO NOT give vinegar or other acids. DO NOT induce vomiting. Get prompt medical attention.

SECTION 5. FIRE-FIGHTING MEASURES

PHYSICAL HAZARDS

POTENTIAL FOR FIRE:	None. Nonflammable and Noncombustible liquid.
POTENTIAL FOR EXPLOSION:	None. Nonflammable and Noncombustible liquid.
EXTINGUISHING MEDIA	N/A
FIRE FIGHTING PROCEDURES:	N/A

REVISED: 02/16/11

SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP OF SPILLS

Store this product in a cool, dry area, away from sunlight and heat to avoid deterioration. In case of spill, flood area where spill has occurred with large quantities of water. With permission from local authorities, diluted product may be flushed to a sanitary sewer. Product may also be absorbed with sand or diatomaceous earth. Absorbed products must be disposed of in accordance with applicable Federal, State, and/or local regulations. Contact HASA, Inc. for guidance.

SECTION 7. HANDLING AND STORAGE

GENERAL PRECAUTIONS FOR SAFE USE AND HANDLING

Open containers carefully. Sodium hypochlorite solutions are packaged with vented closures. Do not use containers which are leaking or show evidence of having leaked. Mix only with water. Do not mix with other chemicals. Use clean, dry utensils when mixing. Do not discharge this product or mixtures of this product into lakes, streams, ponds, bays, estuaries, or the ocean. Sodium hypochlorite is toxic to aquatic organisms at very low levels.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTION AND HYGIENE

Wear goggles or face shield and rubber gloves when handling. Remove and wash contaminated clothing before reuse. Wash hands after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	12.1 mm Hg at 20°C [12.5% solution]	Flash Point:	Not Applicable.
Weight/Gallon:	10.0 lbs. (4.54 kg.)	pH:	11.2 – 11.4
Density [liquid]:	1.20 at 20°C (68°F)	Odor:	Slight Bleach
Bulk Density:	Not Applicable.	Boiling Point:	Decomposes
Melting Point:	Not Applicable.	Freezing Point:	-20° Fahrenheit
Physical State:	Liquid Solution	Color:	Straw Yellow
Solubility in Water:	Complete	Stability:	Stable

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY: Violent reactions with amines, ammonium aldehyde, ammonium carbonate, aziridine, methanol, phenylacetonitrile, ammonium nitrate, ammonium oxylate, ammonium phosphate, cellulose, ethylene imine. Do not mix acids, aqua ammonia, or other organic or inorganic chemicals with this product.

SECTION 11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS

SIGNS AND SYMPTOMS OF EXPOSURE:	Eyes and skin irritation. Chemical burns to broken skin.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:	No data available.
ORAL [INGESTION] LD50:	No data available.
DERMAL [SKIN ABSORPTION] LD50:	No data available.
INHALATION [BREATHING] LC50:	No data available.
EYE IRRITATION:	Irritating. May cause eye damage.
SKIN IRRITATION:	Mild irritation. Not considered to be a skin sensitizer.
OSHA PEL:	None established.
ACGIH TLV/TWA:	None established.

CARCINOGENIC [CANCER POTENTIAL] INFORMATION

NATIONAL TOXICOLOGICAL PROGRAM [NTP] SIXTH ANNUAL REPORT ON CARCINOGENS:	Not listed.
INTERNATIONAL AGENCY FOR RESEARCH ON CANCER [IARC] MONOGRAPHS, V. 1-53, SUPPS. 1-8:	Not listed.
LISTED BY FEDERAL OSHA AS CARCINOGENS:	Not listed.

Safe Drinking Water and Toxic Enforcement Act of 1986 [Proposition 65, California only]: Small quantities – less than 100 ppm (parts per million) – of impurities, including bromates, may be found in all chlorinating products, including this product. Bromates are derived from bromides, which are present in sodium chloride (table salt) from which chlorine is manufactured. Additional small quantities of bromates may be generated during the disinfection process. Bromates are known by the State of California to cause cancer when administered by the oral (drinking or ingesting) route. Read and follow label directions and use care when handling or using this product. The US Environmental Protection Agency has established a maximum contaminant level (MCL) for bromates in drinking water at 10 ppb (parts per billion). Application of this product in accordance with label directions at use dilution will not exceed this level. This warning is provided pursuant to Proposition 65, the Safe Drinking Water and Toxic Enforcement act of 1986, Chapter 6.6 of the California Health and Safety Code, which requires the Governor of California to publish a list of chemicals "known to the state to cause cancer or reproductive toxicity." This list is compiled in accordance with the procedures established under the proposition, and can be obtained on the internet from California's Office of Environmental Health Hazard Assessment at http://www.oehha.ca.gov. There are over 700 chemical substances on this list.

SECTION 12. ECOLOGICAL INFORMATION

Additional ecological information: No data is available on the product itself.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL : Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulations.

ENVIRONMENTAL HAZARDS : Empty containers should be taken to an approved waste handling site for recycling or disposal. If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14. TRANSPORT INFORMATION

HAZARDOUS MATERIALS TRANSPORTATION REGULATIONS, DEPARTMENT OF TRANSPORTATION (FEDERAL) 49 CFR 172.101

PROPER SHIPPING DESCRIPTION [1 GALLON OR LESS]: Consumer Commodity, ORM-D

PROPER SHIPPING DESCRIPTION [GREATER THAN 1 GALLON]: Hypochlorite Solutions, 8, UN1791, P.G. III

UNIFORM FIRE CODE STANDARDS 79-3, UNIFORM FIRE CODE, V. II [1997 EDITION]: 2-0-0

SECTION 15. REGULATORY INFORMATION

FEDERAL/STATE LISTS/REGISTRATION/S/REPORTING REQUIREMENTS

CERCLA Hazardous Substance [Section 1010 [4], P.L. 96-510]: RQ=100 lbs [80 gallons for 12.5% solution]

EXTREMELY HAZARDOUS SUBSTANCE [40 CFR 355, APPENDIX A]: Not listed.

PESTICIDE PRODUCT 7 U.S.C. 136 ET SEQ.: Registered as a pesticide product by Federal EPA.

TOXIC SUBSTANCE UNDER TSCA: Not reported.

PESTICIDE PRODUCT [VARIOUS STATE LAWS]: Registered as pesticide product in states where marked.

MATERIAL CLASSIFICATION

OSHA Hazard Communication Standard, Department of Labor, Occupational Safety and Health Division, 29 CFR 1910.1200: Irritant

SECTION 16. OTHER INFORMATION

CONTACT PERSON: MSDS Coordinator, Meras Engineering Inc, San Francisco, CA 94102, (866) 899-9762

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.