

# MATERIAL SAFETY DATA SHEET

Total Solutions  
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GENERAL INFORMATION NUMBER: (414) 354-6417  
CHEMTREC: (800) 424-9300

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## I - Product Identification

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### Bio-Action

**PRODUCT CODE:** 0528

**CHEMICAL FORMULATION:** Liquid bacteria/enzyme solution.

**NFPA HAZARD IDENTIFICATION SYSTEM:** **HEALTH:** 0

**FLAMMABILITY:** 0

**REACTIVITY:** 0

**HAZARD RATING:** 4 - Extreme;

3 - High;

2 - Moderate;

1 - Slight;

0 - Insignificant

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## II - Hazardous Ingredients

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Values reported as TWA unless noted.

<u>SUBSTANCE</u>	<u>APPROX</u> <u>%</u>	<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>	<u>EPA 40 CFR:</u> <u>302</u> <u>355</u> <u>372</u>	<u>CAS #</u>
Contains no hazardous components as defined in 29 CFR 1910.1200					

Key: **PEL:** Permissible Exposure Limit    **TLV:** Threshold Limit Value    **C:** Ceiling level    **STEL:** Short Term Exposure Limit  
**N/A:** Not Applicable    **N/D:** Not Determined    **N/E:** Not Established    **Y:** Yes    **N:** No  
**302:** CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).  
**355:** SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).  
**372:** SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

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## III - Physical Data

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**BOILING POINT (°F):** N/D

**SPECIFIC GRAVITY (WATER = 1):** 1.03

**VAPOR PRESSURE (mm Hg):** N/D

**VOC CONTENT (% by weight):** 38.2

**VAPOR DENSITY (AIR = 1):** N/D

**EVAPORATION RATE (WATER = 1):** N/D

**SOLUBILITY IN WATER:** Soluble

**pH:** 6.5-7.5

**APPEARANCE AND ODOR:** Thickened, green liquid; citrus fragrance.

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## IV - Fire and Explosion Hazard Data

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**FLASH POINT (°F):** None

**(TEST METHOD):** Closed cup

**FLAMMABLE LIMITS IN AIR (VOLUME %)**

**UPPER:** N/A

**LOWER:** N/A

**EXTINGUISHING MEDIA:** Water, foam, carbon dioxide, dry chemical.

**SPECIAL FIRE FIGHTING PROCEDURES:** Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARD:** None

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**V - Reactivity Data**

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**STABILITY:** Stable**INCOMPATIBILITY:** None.**CONDITIONS TO AVOID:** None.**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce oxides of carbon.**HAZARDOUS POLYMERIZATION:** Will not occur.**CONDITIONS TO AVOID:** None

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**VI - Health Hazard Data**

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**ROUTES OF ENTRY INHALATION: EYE CONTACT: X SKIN CONTACT: X INGESTION: X****INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS:** None**EFFECTS OF OVEREXPOSURE****IF IN EYES:** Mild irritation and redness.**IF ON SKIN:** Irritation, defatting of skin with prolonged exposure. Bacterial infection may occur through open wounds or broken skin.**IF SWALLOWED:** Nausea, cramps, diarrhea. Aspiration of this product may occur.**IF INHALED:** None known under normal use.**EMERGENCY AND FIRST AID PROCEDURES****IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.**IF ON SKIN:** Wash with water. In case of contact with open wounds or broken skin wash affected area with soap & water and apply a topical antiseptic agent.**IF SWALLOWED:** Contact physician or poison control center immediately. Give affected person 1 to 2 glasses of water. Never give anything to an unconscious person.**IF INHALED:** Remove person to fresh air.

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**VII - Spill or Leak Protection**

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**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Contain spill. Soak up spilled material with inert absorbent material and place in a properly marked closed container for proper disposal or recover for reuse. Rinse remaining residue with water.**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

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**VIII - Special Protection Information**

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**RESPIRATORY PROTECTION:** Use with adequate ventilation.**VENTILATION****LOCAL:** Not required**MECHANICAL:** Not required**PROTECTIVE GLOVES:** Chemical resistant.**EYE PROTECTION:** Safety glasses.**OTHER PROTECTIVE EQUIPMENT:** None.**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place. Keep container tightly closed when not in use.**OTHER PRECAUTIONS:** Keep out of reach of children.

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**IX - Transportation Information (ground transportation only)**

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**DOT PROPER SHIPPING NAME:** None**DOT CLASS:** None**DOT ID NUMBER:** None**DOT PACKING GROUP:** None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

**REVISION DATE:** January 25, 2006**Prepared by:** Technical Dept.**DATE OF ISSUE:** February 1, 2006

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