



Chemical Name: Orange Away

Manufacturer: Total Solutions

Container size: 15oz.

Location: VLA

Disposal: Place empty container in trash.

MATERIAL SAFETY DATA SHEET

Bio Chem, Inc.
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GENERAL INFORMATION NUMBER: 1-800-653-9795

REVISION DATE: September 23, 2002
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I - Product Identification

Orange Degreaser

PRODUCT CODE: 0378

CHEMICAL FORMULATION: Citrus based degreaser.

NFPA HAZARD IDENTIFICATION SYSTEM: HEALTH: 1 FLAMMABILITY: 2 REACTIVITY: 0
HAZARD RATING: 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

II - Hazardous Ingredients

Values reported as TWA unless noted.

SUBSTANCE	APPROX %	OSHA PEL	ACGIH TLV	EPA 40 CFR:			CAS #
				302	355	372	
Poly (oxyethylene) nonylphenol	1.00-5.00	N/E	N/E	N	N	N	9016-45-9
Ethoxylated octyl phenol	1.00-10.0	N/E	N/E	N	N	N	9036-19-5
d-Limonene	85.0-95.0	N/E	N/E	Y	N	N	5989-27-5

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).

III - Physical Data

BOILING POINT (°F): N/E SPECIFIC GRAVITY (WATER = 1): 0.845
VAPOR PRESSURE (mm Hg): N/D VOC CONTENT (% by weight): 85.00-90.00
VAPOR DENSITY (AIR = 1): N/E EVAPORATION RATE (WATER = 1): > 1.0
SOLUBILITY IN WATER: Emulsifies pH: N/A
APPEARANCE AND ODOR: Clear, water-white liquid; citrus odor.

IV - Fire and Explosion Hazard Data

FLASH POINT (°F): 122 (TEST METHOD): Closed cup
FLAMMABLE LIMITS IN AIR (VOLUME %) UPPER: 0.7 LOWER: 6.1
EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical.
SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should be equipped with full protective gear including self-contained breathing apparatus.
UNUSUAL FIRE AND EXPLOSION HAZARD: Use water spray to cool fire-exposed containers. Solvent vapors may cause flashback.

V - Reactivity Data

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

VI - Health Hazard Data

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:** Moderate to severe irritation, redness and possible tearing.**IF ON SKIN:** Irritation, chapping and dermatitis, with prolonged or repeated exposure. Contains a possible sensitizer.**IF SWALLOWED:** Nausea, cramps, diarrhea. Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death.**IF INHALED:** Irritation of the respiratory tract, coughing and headache.**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:** Remove contaminated clothing and launder separately before re-use. Wash with soap and water. If irritation persists, obtain medical attention.**IF SWALLOWED:** Call a physician or poison control center immediately. Do not induce vomiting. Rinse mouth with water, then drink one glass of water. Never give anything by mouth to an unconscious person.**IF INHALED:** Remove person to fresh air. If irritation persists, obtain medical attention.

VII - Spill or Leak Protection

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Ventilate area and extinguish all sources of ignition. Contain spill. Soak up with inert absorbent and place in a properly labeled closed container for disposal.**WASTE DISPOSAL METHOD:** Consult local environmental authorities.

VIII - Special Protection Information

RESPIRATORY PROTECTION: Use with adequate ventilation.**VENTILATION****LOCAL:** Recommended**MECHANICAL:** Not required**PROTECTIVE GLOVES:** Chemical resistant.**EYE PROTECTION:** Chemical goggles or safety glasses.**OTHER PROTECTIVE EQUIPMENT:** Protective clothing, eye wash station.**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place, away from heat or open flame. Keep container tightly closed when not in use.**OTHER PRECAUTIONS:** Keep out of reach of children. Do not cut or weld on empty containers as they may contain combustible residue.

IX - Transportation Information (ground transportation only)

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.

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