MATERIAL SAFETY DATA SHEET

Total Solutions P.O. Box 240014 Milwaukee, WI 53224

TOTAL SOLUTIONS

REVISION DATE: July 19, 2005 DATE OF ISSUE: July 20, 2005

GENERAL INFORMATION NUMBER: (414) 354-6417

CHEMTREC: (800) 424-9300

I - Product Identification

Orange Away

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.						
	APPROX	OSHA	ACGIH	EPA 40 CFR:			
SUBSTANCE	<u>%</u>	<u>PEL</u>	$\underline{\mathbf{TLV}}$	<u>302</u>	<u>355</u>	<u>372</u>	CAS#
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

VAPOR PRESSURE (mm Hg): N/D

VAPOR DENSITY (AIR = 1): N/E

SPECIFIC GRAVITY (WATER = 1): 0.845

VOC CONTENT (% by weight): 85.00-90.00

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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