# MATERIAL SAFETY DATA SHEET

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GENERAL INFORMATION #: 314-647-1888
EMERGENCY TELEPHONE #: (800) 854-4236

## I - PRODUCT IDENTIFICATION

**PRODUCT CODE:** #175  
**CHEMICAL FORMULATION:** CITRUS BASED CLEANER, DEGREASER & DRAIN MAINTAINER

<table>
<thead>
<tr>
<th>NFPA HAZARD IDENTIFICATION SYSTEM</th>
<th>HEALTH</th>
<th>FLAMMABILITY</th>
<th>REACTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 - Extreme;</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>3 - High;</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>2 - Moderate;</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>1 - Slight;</td>
<td></td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>0 - Insignificant</td>
<td></td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

**HAZARD RATING:**
- 4 - Extreme;             
- 3 - High;               
- 2 - Moderate;           
- 1 - Slight;            
- 0 - Insignificant

## II - HAZARDOUS INGREDIENTS

### Hazardous Components (Specific Chemical Identity; Common Name (s))

<table>
<thead>
<tr>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIHTLV</th>
<th>Other Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Recommended</td>
<td>% optional</td>
</tr>
</tbody>
</table>

**NON-HAZARDOUS**
- **ORANGE TERPENES** 5989-27-5 NE
- **HYDROCARBONS (PETROLEUM DISTILLATES)** 64741-65-7 NE
- **SURFACTANTS** NE

### 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 (C/F):** 349°F
- **MELTING POINT:** N/A
- **SPECIFIC GRAVITY (WATER = 1):** 0.84
- **VOC CONTENT (% by weight):**
- **EVAPORATION RATE (Water = 1):** 1
- **pH:** 13.50

### APPEARANCE AND ODOR:
- LIGHT AMBER BROWN WITH AN ORANGE FRAGRANCE

## IV - FIRE AND EXPLOSION HAZARD

<table>
<thead>
<tr>
<th>FLASH POINT (F/C):</th>
<th>125°F TCC</th>
<th>(TEST METHOD):</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLAMMABLE LIMITS:</td>
<td>N/E</td>
<td>UPPER: 6.0%</td>
</tr>
<tr>
<td>EXTINGUISHING MEDIA:</td>
<td>DRY POWDER, FOAM</td>
<td>LOWER: 0.7%</td>
</tr>
</tbody>
</table>

### SPECIAL FIRE FIGHTING PROCEDURES:
- AVOID EXPOSURE TO FUMES OR VAPORS. WEAR SELF-CONTAINED POSITIVE PRESSURIZED BREATHING APPARATUS MSHA/NIOSH APPROVED OR EQUIVALENT

### UNUSUAL FIRE AND EXPLOSION HAZARD:
- KEEP AWAY FROM HEAT, SPARKS & OPEN FLAME. USE WATER SPRAY TO COOL ADJACENT FIRE EXPOSED CONTAINERS. COMBUSTIBLE

## V - REACTIVITY DATA

### STABILITY:
- STABLE

### INCOMPATIBILITY:
- CATIONICS (SEE ABOVE)

### CONDITIONS TO AVOID:
- STRONG OXIDIZING AGENTS, SPARKS & FUMES

### HAZARDOUS DECOMPOSITION OR BYPRODUCTS:
- CARBON DIOXIDE AND CARBON MONOXIDE

### HAZARDOUS POLYMERIZATION:
- WILL NOT OCCUR

### CONDITIONS TO AVOID:
- NONE
PRODUCT NAME: ORANGE SOLV
PRODUCT CODE: #175

VI - HEALTH AND HAZARD DATA

ROUTES OF ENTRY: INHALATION? YES SKIN? DERMAL LD50 5g/Kg INGESTION? ORAL LD50 (RATS) 5g/Kg
HEALTH HAZARDS (ACUTE & CHRONIC): N/E
CARCINOGENICITY: NTP? NE IARC MONOGRAPHS? NE OSHA REGULATED? YES

EFFECTS OF OVEREXPOSURE
IF IN EYES: IRRITATION
IF ON SKIN: IRRITATION
IF SWALLOWED:

EMERGENCY AND FIRST AID PROCEDURES
IF IN EYES: FLUSH WITH FLOWING WATER FOR 15 MINUTES & SEE A PHYSICIAN.

IF ON SKIN: FLUSH WITH FLOWING WATER FOR 15 MINUTES & SEE A PHYSICIAN IF IRRITATION PERSISTS.

IF SWALLOWED: GIVE MILK OR WATER TO DILUTE MATERIAL & DO NOT INDUCE VOMITING. SEE A PHYSICIAN.

IF INHALED: REMOVE TO AREA OF FRESH AIR

VII - SPILL AND LEAK PROTECTION

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: SOAK UP ON ABSORBENT MATERIAL OR FLUSH AWAY WITH WATER.

WASTE DISPOSAL METHOD: CONSULT LOCAL ENVIRONMENTAL AUTHORITIES.

VIII - SPECIAL PROTECTION INFORMATION

VENTILATION: Local Exhaust: PREFERRED Mechanical: ACCEPTED AT POINT OF VAPOR RELEASE
Special: N/A Other: AVOID BREATHING OF VAPORS

RESPIRATORY PROTECTION: NONE REQUIRED WITH ADEQUATE VENTILATION.

PROTECTIVE GLOVES: IMPERVIOUS RUBBER, SOLVENT RESISTANT

EYE PROTECTION: SPLASH PROOF CHEMICAL GOGGLES

OTHER PROTECTIVE EQUIPMENT: EYEWASH FACILITIES

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORE AWAY FROM HEAT OR OPEN FLAME. KEEP CONTAINER CLOSED WHEN NOT IN USE. DO NOT CONTAMINATE WATER. FOOD OR FEED.

OTHER PRECAUTIONS: KEEP OUT OF REACH OF CHILDREN. DO NOT GET IN EYES, ON SKIN OR CLOTHING

REMOVE AND WASH CONTAMINATED CLOTHING BEFORE USE.

WORK/HYGIENIC PRACTICES: PRACTICE GOOD PERSONAL HYGIENE. WASH AFTER HANDLING

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