



Maintenance Solutions

# Orange Thunder

High Active Citrus  
Solvent Cleaner



## DESCRIPTION

An economical yet highly active natural citrus solvent based cleaner-degreaser. May be safely used as directed on carpets, sinks, toilets, fiberglass, machinery, tools, grills, ceramic tiles, concrete, graffiti, dumpsters, grease traps, all metals, and much more.

## For Use On:

Carpet  
Sinks  
Toilets  
Urinals  
Laundry

Machinery  
Tools  
Printing Presses  
Concrete  
Ceramic Tiles

Appliances  
Dumpsters  
All Metals  
Paneling  
Fiberglass

## DIRECTIONS

**FOR GENERAL CLEANING and DEODORIZING:** Dilute 2 to 4 ounces of concentrate per gallon of warm water. Sponge or spray onto surface and allow to stand a few moments. Wipe clean with a clean cloth or sponge.

**FOR MACHINERY, ENGINES, RUBBER BURNS, GRAFFITI and HEAVY INDUSTRIAL CLEANING:** Dilute concentrate 8 ounces per gallon of warm water. Mop, spray, or sponge onto surface and allow to stand at least 5 minutes. Scrub or brush thoroughly and rinse with clean water.

**FOR GREASE TRAPS:** Add 8 ounces weekly to all drain openings and allow to stand at least 10 minutes before flushing.

**FOR TOILETS, SINKS, URINALS, SHOWER STALLS, BATHTUBS, CHROME FIXTURES and CERAMIC TILES:** Dilute 2 to 4 ounces per gallon and apply to surface, allowing to stand a few moments. Rinse away all soap film and scale.

**FOR CARPETS, RUGS, UPHOLSTERY and FABRICS:** Dilute 6 to 8 ounces of concentrate per gallon of warm water. Apply with a sprayer or clean cloth. Do not over-wet. Gently work out gum, tar, grease, oil, etc. Blot dry with clean cloth.

**FOR ODOR CONTROL AROUND DUMPSTERS, GARBAGE DISPOSALS, SEPTIC TANKS, SEWAGE PLANTS, KENNELS, ETC.:** Dilute 4 ounces of concentrate per gallon of water. Spray or mop onto area to be treated and allow to stand. Around sewage treatment plants apply by the drip method or fogging.

**\*NOTE:** Pretest all plastic surfaces prior to use.

## PRODUCT SPECIFICATIONS

<b>Active Ingredients:</b>	75.0 ± 0.5%	<b>Fumes:</b>	None
<b>Color:</b>	Orange	<b>Solubility:</b>	Emulsifiable
<b>Odor:</b>	Orange	<b>Emulsification:</b>	Excellent
<b>Base:</b>	100% natural citrus solvent	<b>Detergency:</b>	Excellent
<b>pH:</b>	12.0 - 12.5	<b>Rinsability:</b>	Excellent
<b>Viscosity:</b>	Slightly viscous	<b>Biodegradability:</b>	Complete
<b>Foam:</b>	Moderate	<b>Storage/Stability:</b>	2 years
<b>Abrasives:</b>	None	<b>Weight per Gallon:</b>	7.39 lbs./gal.
<b>Phosphate Content:</b>	None	<b>Freeze / Thaw Stability:</b>	Keep from freezing

Natural Citrus Solvent Cleaners

## SECTION 1-PRODUCT IDENTIFICATION AND SUPPLIER INFORMATION

<b>Manufacturer's Name:</b> Misco Products Corporation	<b>Product Name:</b> Orange Thunder
<b>Manufacturer's Address:</b> 1048 Stinson Drive Reading, PA 19605	<b>Generic Name:</b> Citrus Solvent Cleaner
<b>Manufacturer's Phone #:</b> (610) 926-4106	<b>Chemical Family:</b> Solvent Detergent Blend
	<b>Formula:</b> Proprietary

## SECTION 2-INGREDIENT INFORMATION

CHEMICAL NAME	CAS NO.	WT. %	PEL	TWA-TLV	STEL-TLV
Water	7732-18-5	to 100			
Citrus Terpenes (d-limonene)	5989-27-5	35 to 40			
Butyl Glycol	111-76-2	20 to 25	25 ppm	25 ppm	N/A
Coconut Diethanolamide	8051-30-7	0 to 5			
Nonionic Surfactant	9016-45-9	0 to 5			
Anionic Surfactant	Proprietary	5 to 10			
Dye	N/A	0 to 5			

## SECTION 3-PHYSICAL DATA

<b>Boiling Point (°F):</b> 335 F. Initial	<b>Specific Gravity:</b> .887
<b>Vapor Pressure:</b> <10mm Hg @ 68 F.	<b>Vapor Density (Air=1):</b> >1
<b>% Volatile:</b> 85+	<b>pH:</b> 12.0 ñ 12.5
<b>Solubility in Water:</b> Emulsifies	<b>Evaporation Rate (Water=1):</b> <1
<b>Physical Description:</b> Thin orange liquid with pleasant odor.	

## SECTION 4-FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used):</b> 114 F. (TCC)	
<b>Upper Explosion Limit:</b> 6.0	<b>Lower Explosion Limit:</b> 1.0
<b>Extinguishing Media:</b> Foam, CO <sub>2</sub> , or Dry Chemical	
<b>Special Firefighting Procedures:</b> Do Not Use Water.	
<b>Unusual Fire and Explosion Hazards:</b> Drums heated by fire can explode.	

## SECTION 5-REACTIVITY DATA

<b>Stability:</b> Stable	<b>Hazardous Polymerization:</b> None
<b>Hazards Decomposition Products:</b> Carbon monoxide possible if burned.	<b>Incompatibility (Materials to Avoid):</b> None known.

## SECTION 6-STORAGE AND HANDLING INFORMATION

Combustible liquid ñ Avoid contact with heat, spark or open flame. Keep out of reach of children. For use by trained personnel only. Keep container closed during storage. For institutional and industrial use only. Avoid contact with eyes, skin and clothing. Wear protective eyewear and rubber gloves when handling. Avoid breathing of vapors or mists. Use in well-ventilated area.

## SECTION 7-HEALTH HAZARDS AND FIRST AID

**Effects of Overexposure:**  
**Skin:** Defatting to skin with prolonged or repeated contact. May lead to dryness and irritation.  
**Eyes:** Eye irritant. May cause redness, burning, or tearing.  
**Inhalation:** Vapors and mists may be irritating to mucous membranes in the nose, throat, and lungs.  
**Ingestion:** May be irritating to the mouth, throat, and gastrointestinal system.  
**First Aid Procedures:**  
**Skin:** Flush with water. Seek medical attention if irritation persists.  
**Eyes:** Flush with large quantities of water, holding eyelids open. Seek medical attention if irritation persists.  
**Inhalation:** Get to fresh air. Seek medical attention if irritation persists.  
**Ingestion:** Do not induce vomiting. Drink large quantities of water. Seek medical attention immediately.

## SECTION 8-SPECIAL PROTECTION INFORMATION

**Respiratory Protection:** Use in well-ventilated area.  
**Ventilation Requirements:** Provide local exhaust to keep TLV of Section 2 ingredients below acceptable limit.  
**Protective Gloves:** Chemical resistant rubber or neoprene.  
**Eye Protection:** Safety glasses or chemical splash goggles.  
**Other Protective Equipment:** Eyewash should be available nearby.

## SECTION 9-SPILL OR LEAK PROCEDURES

**Steps to be taken in Case Material is Released or Spilled:** Shut off all ignition sources. Ventilate area well. Floors will become slippery. Avoid walking in product. Keep unessential personnel away. Mop up or otherwise absorb and hold disposal. Avoid discharge to sewer or open waterways.  
**Waste Disposal Method:** Any method in accordance with local, state and federal laws. Best method is to recycle or reuse for intended purpose. Consult local authorities for disposal in public sewer. Do not dispose of into storm drain, stream, river or to ground. Rinse container thoroughly before discarding in trash.

## SECTION 10-REGULATORY INFORMATION

<b>SARA Title III - Section 311/312 -Hazard Categories:</b>	<b>Shipping Information:</b>
Yes - Fire Hazard	FOR CONTAINERS > 1 Gallon : Cleaning Compound
No - Sudden Release of Pressure Hazard	
No - Reactivity Hazard	FOR 1 GALLON CONTAINERS : Cleaning Compound
Yes - Immediate (acute) Health Hazard	
No - Delayed (chronic) Health Hazard	FOR CONTAINERS < 1 GALLON : Cleaning Compound

## HMIS Hazardous Materials Identification System

<b>Health</b>	<b>2</b>
<b>Flammability</b>	<b>2</b>
<b>Reactivity</b>	<b>0</b>
<b>Personal Protection</b>	<b>B</b>

**FOR EMERGENCY MEDICAL OR TRANSPORT INFORMATION:** CHEM-TEL, Inc. @ 800-255-3924 (24 hours, 7 days per week)

This product contains the following toxic chemical(s) subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CAS#	Chemical Name	Percent by Weight
111-76-2	Butyl Glycol (glycol ether)	20

This product contains the following chemical(s) which have been established to be either a carcinogen or suspected carcinogen.

CAS#	Chemical Name	Percent by Weight
	None	

## SECTION 11-OTHER INFORMATION

This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of our products either alone or in combination with other products. It is the responsibility of the user to provide a safe workplace, using the health and safety information contained herein as a guide. This company will accept no liability for damages or loss incurred from the improper handling and use of this product