

MATERIAL SAFETY DATA SHEET

IDENTITY: Orange Plus

SECTION I

Manufacturer Name:	Emergency Telephone Number
American Solutions LLc	551-486-5549
P.O.Box 8191	Telephone For Information
Haledon , N.J. 07538	973-949-4098
	Date Prepared
	April 2007
	Prepared By: Staff

SECTION II - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous Components	OSHA PEL	ACGIH TLV	OTHER LIMITS	PERCENT OPTIONAL
d-Limonene CAS# 5989-27-5	Not listed	Not listed		

DOT Shipping Classification: Not regulated when shipped domestically in 55 gallon drums or smaller containers

Health Rating 1
Flammability 2
Reactivity 0

SECTION III - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point:..... 339 deg. F	Specific Gravity.(H2O=1) 0.85
Vapor Pressure(mm Hg).... 1 mm @ 14 deg. C	Melting Point.....: NA
Vapor Density (air=1).... 4.7	Evaporation Rate.....: <1
Solubility in water..... Miscible	(Butyl Acetate=1)
Appearance and Odor: Clear to slightly amber liquid, orange scent	

SECTION IV - FIRE AND EXPLOSION HAZARD

Flash Point (Method Used): 113 deg. F Flammable Limits: LEL: 0.7 UEL: 6.1
Extinguishing Media: Foam, carbon dioxide or dry chemical. Avoid contact with water.

Special Fire Fighting Procedures: Closed containers exposed to heat, but not burning, could be suitably cooled with water.

Unusual Fire and Explosion Hazards: Under fire conditions, may release carbon monoxide, carbon dioxide and other decomposition products of undetermined hazard. Dense black smoke produced.

SECTION V

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Stability Unstable [] Stable [X]

Conditions to Avoid: Avoid exposure to flames or excessive heat.

d-Limonene reacts violently with iodine pentafluoride in tetrafluoroethylene

Incompatibility (materials to avoid): Strong oxidizing agent, acids, peroxides, halogens, vinyl chloride, iodine fluoride, acidic agents, including clays.

Hazardous Decomposition or Byproducts: When heated to decomposition, d-Limonene emits acrid smoke, fumes, carbon monoxide and carbon dioxide.

Polymerization May occur [] Will not occur [X]

Conditions to Avoid

SECTION VI - Health Hazard Data

Route(s) of entry Inhalation? Yes Skin? Yes Ingestion? Unknown

Health Hazards(Acute and Chronic): Vapors irritate eyes. Prolonged contact may cause photosensitivity, pain and damage. Skin contact may cause moderate itching. Frequent exposure may induce dermatitis. Vapor irritates mucous membranes. May be moderate irritant to throat and respiratory passages by inhalation. Ingestion - Unknown.

Carcinogenicity: NTP? NO (ARC Monographs)? NO OSHA Regulated? NO

Medical Conditions Generally Aggravated by Exposure: None

Emergency and First Aid Procedures: Eyes and skin - Flush with water. If irritation persists, see physician. Inhalation - Remove to fresh air and consult a physician immediately. Ingestion - For small amounts, give a glass of water or milk to dilute substance. For large amounts, consult a physician immediately.

SECTION VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled: No smoking! Small spills - Wipe up material with paper rags. DO NOT USE CLAY. Place them in closed metal waste container. Large spills - Do not hose down drains. Use non-flammable absorbent.

Waste Disposal Method: According to Federal, State and Local authorities.

Precautions For Storing and Handling: Keep containers in cool storage, less than 80 deg. F away from heat, flame and strong oxidizing agents.

Other Precautions: None

SECTION VIII - Control Measures

Respiratory Protection (Specify Type):Local exhaust should be adequate. May use mechanical.

Ventilation : Local Exhaust:

Special:

Mechanical :

Other:

Suggested: Protective Gloves: Solvent resistant

Suggested: Eye Protection: Safety glasses or faceshield

Suggested: Other Protective Clothing or Equipment: Eye wash and shower stations should be available.

Work Hygienic Practices: Wash thoroughly after handling. Launder contaminated clothing before reuse.