



ZEP MANUFACTURING COMPANY
 Acuity Specialty Products Group, Inc.
 P.O. BOX 2015
 ATLANTA, GA 30301
 1- 877- I - BUY- ZEP

Material Safety Data Sheet and Safe Handling and Disposal Information

Section 1. Chemical Product and Company Identification

Product name BIG ORANGE (LIQUID)

Product Use Industrial Solvent Degreaser

Product Code 0415

Date of issue 08/22/03 **Supersedes** 05/05/03

Emergency Telephone Numbers **For MSDS Information:**
 Acuity Specialty Products Group, Inc.
 Compliance Services 1-877-I-BUY-ZEP

For Medical Emergency:
 INFOTRAC
 (877) 541-2016 Toll Free - All Calls Recorded

For a Transportation Emergency:
 CHEMTREC
 (800) 424-9300 - All Calls Recorded
 In the District of Columbia (202) 483-7616

Prepared by Compliance Services Group
 Acuity Specialty Products Group
 1420 Seaboard Industrial Blvd.
 Atlanta, GA 30318

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Section 2. Composition, Information on Ingredients

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
D-LIMONENE - orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-	5989-27-5	>90	Not available.

Section 3. Hazards Identification

Acute Effects **Routes of Entry** Eye contact. Skin contact Inhalation.

Skin Hazardous in case of skin contact (irritant, sensitizer). May cause allergic reactions to certain individuals. Prolonged or repeated contact may dry skin and cause irritation.

Eyes Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

Inhalation Hazardous in case of inhalation. Over-exposure by inhalation may cause respiratory irritation.

Ingestion Aspiration hazard if swallowed- can enter lungs and cause damage. No data on acute toxicity of the product when ingested.

HMIS	
Health	1
Fire Hazard	2
Reactivity	0
Personal Protection	B

Carcinogenic Effects Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

Chronic Effects Prolonged or repeated contact may dry skin and cause irritation. Defatting properties, may aggravate an existing dermatitis

See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if irritation develops.

Skin Contact Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Inhalation If excessive quantities inhaled, remove to fresh air. If symptoms persist, seek immediate medical attention.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If affected person is conscious, give plenty of water to drink. Get medical attention immediately.

Section 5. Fire Fighting Measures

Flash Point CLOSED CUP: 49.4°C (120.9°F). **Flammable Limits** Not determined.

Flammability COMBUSTIBLE.

Fire Hazard Combustible liquid and vapor.

Fire-Fighting Procedures Use foam or all purpose dry chemicals to extinguish. Carbon Dioxide (CO₂). Cool closed containers exposed to fire with water. Wear special protective clothing and positive pressure, self-contained breathing apparatus.



Section 6. Accidental Release Measures

Spill Clean up Eliminate all ignition sources. Put on appropriate personal protective equipment (see Section 8). Absorb with an inert material and place in an appropriate waste disposal container. To clean the floor and all objects contaminated by this material, use detergent. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Section 7. Handling and Storage

Handling Keep away from heat, sparks and flame. Avoid contact with skin and eyes. Avoid breathing vapors of this product. Wash thoroughly after handling. Wash contaminated clothing before reusing.

Storage Store and use away from heat, sparks, open flame, or any other ignition source. Keep container tightly closed in a cool, well-ventilated place. Store between 40°F - 120°F. Keep out of the reach of children.

Section 8. Exposure Controls, Personal Protection**Personal Protection****Protective Clothing (Pictograms)**

Eyes Safety glasses.

Body Gloves.



Respiratory Use with adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

Physical State Liquid.

Color Orange.

pH Not applicable

Odor Orange. (Strong.)

Boiling Point 170°C (338°F)

Vapor Pressure 0.3 kPa (1.9 mmHg) (at 20°C)

Specific Gravity 0.85 (Water = 1)

Vapor Density 4.7 (Air = 1)

Solubility Emulsifies in water.

Evaporation Rate <1 compared to Water

VOC (Consumer) 789 (g/l). (92.7%)

Section 10. Stability and Reactivity

Stability and Reactivity The product is stable.

Incompatibility Avoid contact with strong oxidizers, excessive heat, sparks or open flame. Incompatible with some strong acids. Reactive with acidic Clay.

Hazardous Polymerization Will not occur.

Hazardous Decomposition Products Carbon Dioxide, Carbon Monoxide and Other organic materials.

Section 11. Toxicological Information**Toxicity to Animals****d-Limonene:**

ORAL (LD50): Acute: 5600 mg/kg [Mouse]. 4400 mg/kg [Rat].

DERMAL (LD50): Acute: >5000 mg/kg [Rabbit]

Section 12. Ecological Information

Ecotoxicity Not available.

Biodegradable/OECD Not available.

Section 13. Disposal Considerations

Waste Information Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Waste Stream Code: D001
Classification: Hazardous Waste
Origin: RCRA

Consult your local or regional authorities.

Section 14. Transport Information

Proper shipping name Not applicable.

DOT Classification Not a DOT controlled material (United States).

UN number Not applicable.

Section 15. Regulatory Information

U.S. Federal Regulations SARA 313 toxic chemical notification and release reporting: No products were found.

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 regulated toxic substances: No products were found.

Section 16. Other Information

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.