



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Product name BIG ORANGE
Product use Industrial Solvent Degreaser
Product code 0415
Date of issue 09/16/14 **Supersedes** 05/24/12

Emergency Telephone Numbers

For MSDS Information:

Technical Services Group
Telephone (780) 453-8100
(Business Hours 8:00am - 5:00pm)

For Medical or Transportation Emergency

CANUTEC (24 Hours)
(613) 996-6666 - Call Collect

Prepared By

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Section 2. Hazards Identification

Emergency overview

WARNING!

COMBUSTIBLE.

Keep away from heat, sparks and flame. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing.

NOTE: MSDS data pertains to the product as delivered in the original shipping container(s). Risk of adverse effects are lessened by following all prescribed safety precautions, including the use of proper personal protective equipment.

Acute Effects

Routes of Entry

Dermal contact. Eye contact. Inhalation.

Eyes May cause eye irritation.
Skin May cause skin irritation.
Inhalation No known significant effects or critical hazards.
Ingestion May be harmful if swallowed.

Chronic effects

Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc.

Additional Information: See Toxicological Information (Section 11)

Section 3. Composition/Information on Ingredients

Name of Hazardous Ingredients

CAS number

% by Weight

D-LIMONENE; orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-	5989-27-5	60 - 100
ALCOHOLS, C11-15, ETHOXYLATED	68131-40-8	1 - 5
ISOOCTYLPHENOXY POLY(ETHYLENEOXY) ETHANOL; ipe; poly(oxy-1,2-ethanediyl), alpha-(isooctylphenyl) omega-hydroxy	9004-87-9	1 - 5

Section 4. First Aid Measures

Eye Contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

Skin Contact Flush affected skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation If inhaled, remove to fresh air. If irritation persists, get medical attention.

Ingestion If swallowed, do not induce vomiting. 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) [Tagliabue.]
Flammable Limits	Not determined.
Flammability	COMBUSTIBLE.
Auto-ignition Temperature	
Fire-Fighting Procedures	Use dry chemical, CO ₂ , water spray (fog) or foam.
Fire hazard	COMBUSTIBLE LIQUID AND VAPOR. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
Products of Combustion	Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides
Explosion hazard	Not available.

Section 6. Accidental Release Measures

Spill Clean up	Stop leak if without risk. Eliminate all ignition sources. Absorb with an inert material and place in an appropriate waste disposal container. Wash affected area with soap or mild detergent and water.
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Section 7. Handling and Storage

Handling	Put on appropriate personal protective equipment (see section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Use only with adequate ventilation.
Storage	Store and use away from heat, sparks, open flame or any other ignition source. 40°F - 120°F (4.4°C - 49°C). Keep container tightly closed in a cool, well-ventilated place. Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
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No exposure limit value known.

Personal Protective Equipment (PPE)

Eyes	splash goggles
Hands and Body	Chemical-resistant gloves. Neoprene, Nitrile or Rubber gloves.
Respiratory	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Use with adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Section 9. Physical and Chemical Properties

Physical State	Liquid.	Color	Clear. Orange.
pH	Not applicable.	Odor	Orange. [Strong]
Boiling Point	170°C (338°F)	Vapor Pressure	0.25 kPa (1.9 mm Hg) [20°C]
Specific Gravity	0.85	Vapor Density	4.7 [Air = 1]
Solubility		Evaporation Rate	<1 (Water = 1)
Freezing Point		VOC (Consumer)	789.37 (g/l). 6.59 lbs/gal 92.70%

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Incompatibility	Reactive or incompatible with the following materials: oxidizing materials. Incompatible with some strong acids. Keep away from heat, sparks and flame.
Hazardous Polymerization	Under normal conditions of storage and use, hazardous polymerization will not occur.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological Information

Carcinogenicity No known significant effects or critical hazards.

Acute Toxicity**Section 12. Ecological Information**

Environmental Effects No known significant effects or critical hazards.

Aquatic Ecotoxicity

(R)-p-mentha-1,8-diene	-	Acute EC50 421 ug/L Fresh water	Daphnia - Water flea - 48 hours Daphnia magna - <24 hours
	-	Acute EC50 688 ug/L Fresh water	Fish - Fathead minnow - 96 hours Pimephales promelas - 34 days - 19.1 mm - 0.085 g

Section 13. Disposal Considerations**Waste Information**

Waste must be disposed of in accordance with applicable regulations. Consult your local or regional authorities for additional information.

Waste Stream Code: D001
Classification: - [Hazardous waste.]
Origin: - [RCRA waste.]

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
TDG Classification	Not regulated.	-	-	-		-
IMDG Class						-

NOTE: DOT classification applies to most package sizes. For specific container size classifications or for size exceptions, refer to the Bill of Lading with your shipment. **Limited Quantity:** Small quantities of controlled goods are not regulated as Dangerous Goods according to TDG regulations.

PG* : Packing group

Section 15. Regulatory Information**Canada****WHMIS (Canada)**

Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
Class D-2B: Material causing other toxic effects (Toxic).

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

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.*