### d-Limonene

433

## **Description**

The 433 *d-Limonene* is a food grade, natural orange extract. It is a biodegradable product with a pleasant odor.

## **Application**

The 433 will dissolve HIPS (High Impact Polystyrene) used in 3D printing applications for creating support material.

It can also be used for many other applications, such as removing adhesives and tar, cleaning floors, and degreasing. It also works well as a hand cleaner, a release agent, and as graffiti remover.

It can replace petroleum-derived products in many different applications.

### **Benefits**

- Biodegradable solvent and cleaning agent
- 100% bio-based (free of any petroleum product)
- Rated GRAS (Generally Recognized As Safe)
- RoHS Compliant

### d-Limonene Properties

Physical Properties	Value
Color	Clear
Appearance	Colorless
Specific Gravity @25 °C	0.841 ±0.03
Water solubility	Immiscible
Refractive Index	1.472-1.474
Optical Rotation @25 °C	+96° to +104°
Flash Point, Closed Cup	>43 °C [>110 °F]
Percent d-Limonene	95-98.5%

# **Health and Safety**

Please see the 8351 **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

**Environmental Impact:** The volatile organic content is >95%% by EPA and WHMIS standards. It is toxic to aquatic life in high concentration. Please dispose of in accordance to local/regional/national/international regulations.



This product meets the European Directive 2011/65/EU Annex II (ROHS); recasting 2002/95/EC.

Date: 05 August 2014 / Ver. 1.00





ISO 9001 Registered Quality System,
Burlington, Ontario, Canada QMI File # 004008

**Health and Safety:** May cause allergic reaction and skin irritation in some individuals. Wash hands thoroughly after use. Aspiration of d-limonene into the lung

#### **HMIS® RATING**

HEALTH:	*	2
FLAMMABILITY:		3
PHYSICAL HAZARD:		0
PERSONAL PROTECTION:		

Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

# **Application Instructions**

#### To dissolve 3D support structures

- 1. Place the d-limonene solution in a sealable container.
- 2. Place the print in the jar.

## **Packaging and Supporting Products**

#### **Product Availability**

Cat. No.	Form	Net Volume	
433-1L 433-4L	Liquid Liquid	1 L 4 L	1.1 qt 1.1 gal

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## **Technical Support**

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at <a href="https://www.mgchemicals.com">www.mgchemicals.com</a>.

Email: <a href="mailto:support@mgchemicals.com">support@mgchemicals.com</a>

Phone: +1-800-340-0772 Ext. 1030 (Canada, Mexico & USA)

+1-905-331-1396 Ext. 1030 (International) +1-905-331-2862 or +1-800-340-0773

Mailing address: Manufacturing & Support Head Office

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## **Warranty**

Fax:

M.G. Chemicals Ltd. warranties this product for 12 months from the date of purchase by the end user.
M.G. Chemicals Ltd. makes no claims as to shelf life of this product for the warranty. The liability of M.G.
Chemicals Ltd. whether based on its warranty, contracts, or otherwise shall in no case include incidental or consequential damage.

### **Disclaimer**

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. *M.G. Chemicals Ltd.* does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.

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