

4354

### **Description**

The 4354 *Thinner 4* is a slower drying thinner for use with the MG Chemical's urethane and acrylic conformal products. The thinner as excellent solvent strength, making it a good oil and grease remover. It has very low water solubility, so it is unlikely to absorb water and create blush. Its drying speed is slow enough to promote excellent leveling, but it is fast enough to accommodate a reasonable assembly line speed.

### **Applications & Usages**

The 4354 makes a good choice for spray application.

#### **Features and Benefits**

- Blush resistant
- Slow evaporation rate
- Good leveling and gloss
- Highly miscible with other common organic solvents
- Compatible with most substrates used in electronic parts and enclosures

<u>ATTENTION!</u> FOR INDUSTRIAL OR LABORATORY USE ONLY. NOT FOR RETAIL SALE IN CALIFORNIA, UTAH, AND NEW HAMPSHIRE.

### **Principal Components**

NameCAS Numberxylene (isomers)1330-20-7ethylbenzene100-41-4

### **Storage Parameters**

Properties	Value
Shelf Life @22 °C [72 °F]	5 y
Storage Temperature <sup>a)</sup>	-20 to 40 °C [32 to 104 °F]

a) Storage below zero is not necessary. Cool, dry, and well ventilated area is recommended.

Date: 23 February 2017 / Ver. 1.02

4354

### **Properties**

Physical Property	Method	Value
Color Odor Density @25 °C [77 °F] Viscosity @25 °C [77 °F] Flash Point Freezing Point Boiling Point Vapor Pressure @25 °C [77 °F] Relative Evaporation Rate Volatile Organic Compound (VOC) MIR value	Tag Closed Cup	Clear Aromatic 0.87 g/mL <20.5 mm²/s 27 °C [81 °F] -47 °C [-43 °F] 137 °C [279 °F] 1.06 kPa [7.95 mmHg] 0.86 (ButAc = 1) 100% [870 g/mL] 4.09
Solvation Parameters  Solubility in water  Hansen Solubility Parameters a)  (cal/cm³)½; [MPa]½	Total Non-Polar Polar Hydrogen Bonding	Value Insoluble 8.8 [18.0] 8.6 [17.7] 0.5 [1.0] 1.3 [2.6]

a) Hansen parameters calculate using component literature values and volume fraction composition.

### Compatibility

**Substrate Compatibility:** The 4354 *Thinner 4* is compatible with most substrate materials found on printed circuit assemblies.

Solvent Miscibility: The 4354 is highly miscible with other common organic solvent. It can be mixed with

- Alcohols
- Aldehydes
- Aromatic and Aliphatic Hydrocarbons
- Ethers
- Glycols
- Glycol Ethers
- Ketones

4354

### Health, Safety, and Environmental Awareness

Please see the 4354 **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

**Health and Safety:** This liquid is flammable and should be kept away from flames and other ignition sources. It can cause drowsiness and dizziness, and may cause central nervous system damage for prolonged and repeated high exposure. Avoid exposure during pregnancy because it is suspected of being reproductively toxic.

Use only outdoors or in well ventilated area. In cases of inadequate ventilation wear respiratory protection. Avoid breathing in fumes or direct contact with the material.

#### **HMIS® RATING**

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

2 0

NFPA® 704 CODES

Approximate HMIS and NFPA Risk Ratings Legend:

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

**Environmental Impact:** The 4354 has VOC (volatile organic compound) content of 100% [or 870 g/L]. The mixture components are classified as a hazardous air pollutant. It is RoHS compliant.

### **Thinning Instructions**

Make necessary adjustments according to your paint and spray gun equipment usage instructions. A 1.0 (paint):1.0 (thinner) dilution is a common starting point. If sagging is observed, reduce the thinner ratio.

### **Packaging and Supporting Products**

Cat. No.	Packaging	Net Volume		Net Weight		Packagin	Packaging Weight		
4354-1L	Can	945 mL	31.9 fl oz	820 kg	1.8 lb	5.12 kg	11.3 lb <sup>a)</sup>		
4354-4L	Can	3.78 L	1 gal	3.28 kg	7.23 lb	3.8 kg	8.16 lb		
Contact MG Chemicals if custom packaging or sizes are required									

a) Pack of five bottles

Date: 23 February 2017 / Ver. 1.02

4354

### **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 (Canada, Mexico & USA)

+(1) 905-331-1396 (International)

Fax: +(1) 905-331-2862 or +(1) 800-340-0773

Mailing address: Manufacturing & Support Head Office

1210 Corporate Drive 9347–193rd Street

Burlington, Ontario, Canada Surrey, British Columbia, Canada

L7L 5R6 V4N 4E7

### Warranty

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.

Date: 23 February 2017 / Ver. 1.02