

LAQ-XXXX, Green Label Thinners

OMEGALAQ® Temperature Indicating Liquids





GENERAL DESCRIPTION: OMEGALAQ® Temperature Indicating Liquid (LAQ) OMEGAMARKER® consist of a temperature melt material in a liquid form. They are made from the same material used in the OMEGAMARKER® temperature indicating products this time in a lacquer suspension. Lacquer serves as a transport function only. The OMEGALAQ® temperature indicating liquids are used to tell temperatures on surfaces such as polished metal, glass, plastics, rubber, fabrics or electronic components. They can be used for making large marks which can be viewed at a distance. These temperature indicating liquids are widely used for monitoring critical temperatures in the electronics field, such as preheat temperatures for wave soldering. Other applications include dielectric heatsealing, postforming plastic laminate, and annealing polished metal surfaces.

The **OMEGALAQ® liquids** (LAQ) have a time response on the order of milliseconds (0.001 sec.). They are available in many temperature ratings. The OMEGALAQ® liquids have **an accuracy of ±1% of the rated temperature**.

DIRECTIONS FOR USE:

<u>LIQUID TYPE:</u> Shake and/or stir jar contents well just prior to use. Apply a thin coating by using a brush to the surface being tested before the object being tested is brought up to temperature. It dries almost instantly to a dull opaque finish. When its specific temperature is reached, the opaque finish liquifies abruptly. The melted material does not revert to its original opaque appearance but remains glossy and transparent upon cooling.

OMEGALAQ[®] liquids can be diluted to any desired consistency without changing its melting point. The thinner the coating used, the quicker the reaction time will be when the rated temperature has been reached. When thinning, use OMEGA's OMEGALAQ[®] Green Label Thinner only.

REMOVAL AND CLEANING: For lacquers with temperature ratings of 650°F or below, the unheated mark can be removed with alcohol or water. For ratings above 650°F, use water only. If the mark has been heated well above the rated temperature and has become charred, an abrasive procedure may be required for removal.

OMEGALAQ® LIQUIDS IN A VACUUM: The following rated OMEGALAQ® liquids are the best candidates for high vacuum work. They show relatively little loss of substance in a vacuum at the temperature level of their respective melting points, compared to other OMEGALAQ® products of nearby temperatures.

TEMPERATURES (°F)										
175	200	475	1150	1500	1800	2000				
	225	488	1200	1600	1900					
	325	500	1250	1700						
		700	1300							
		750								

Bear in mind that prolonged heating in a high vacuum, or heating to a temperature well above the melting point, some sublimation or evaporation is to be expected. Thus, the user needs to check the suitability of OMEGALAQ[®] products under the temperature/pressure/time regime planned. OMEGA assumes no responsibility for the use of OMEGALAQ[®] products under vacuum conditions.

SHELF LIFE: Temperature indicating Products have a limited shelf life. By verifying the melting point of the lacquers at sixmonth intervals, the effective shelf life of these products may be extended indefinitely. If they have dried out, OMEGALAQ[®] products may be liquefied by using the Green Label Thinner. See directions for use and warranty for further information.

			Servicing Europe:			
OMEGAnet [®] Online Service www.omega.com i		Internet e-mail info@omega.com	Benelux:	Postbus 8034, 1180 LA Amstelveen, The Netherlands Tel: +31 (0)20 3472121 FAX: +31 (0)20 6434643 Toll Free in Benelux: 0800 0993344 e-mail: sales@omegaeng.nl		
USA: ISO 9001 Certified	Servicing North Amer One Omega Drive, Box 4047 Stamford CT 06907-0047		Czech Republic:	Frystatska 184, 733 01 Karviná, Cz	ech Republic FAX: +420 (0)59 6311114 e-mail: info@omegashop.cz	
Canada:	Tel: (203) 359-1660 e-mail: info@omega.com 976 Bergar Laval (Quebec) H7L 5A1, Canada	FAX: (203) 359-7700	France:	11, rue Jacques Cartier, 78280 Guy. Tel: +33 (0)1 61 37 2900 Toll Free in France: 0800 466 342 e-mail: sales@omega.fr	ancourt, France FAX: +33 (0)1 30 57 5427	
For immed	Tel: (514) 856-6928 e-mail: info@omega.ca liate technical or applico	FAX: (514) 856-6886	Germany/Austria	: Daimlerstrasse 26, D-75392 Decker Tel: +49 (0)7056 9398-0 Toll Free in Germany: 0800 639 767	FAX: +49 (0)7056 9398-29	
	Sales Service: 1-800-826-6342 / 1-8 Customer Service: 1-800-622-2378 Engineering Service: 1-800-872-94 TELEX: 996404 EASYLINK: 6296	800-TC-OMEGA® / 1-800-622-BEST® 36 / 1-800-USA-WHEN®	United Kingdom: ISO 9002 Certified	e-mail: info@omega.de One Omega Drive, River Bend Tec Northbank, Irlam, Manchester M44 5BD United Kingdom	chnology Centre	
Mexico:	En Español: (001) 203-359-7803 FAX: (001) 203-359-7807	e-mail:espanol@omega.com info@omega.com.mx			FAX: +44 (0)161 777 6622)-488-488	

It is the policy of OMEGA to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA Engineering, Inc. accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. WARNING: These products are not designed for use in, and should not be used for, human applications.

MADE USA

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

PATENT NOTICE: U. S. Pat. No. 6,074,089; 5,465,838 / Canada 2,228,333; 2,116,055 / UK GB 2,321,712 / Holland 1008153 / Israel 123052 / France 2 762 908 / EPO 0614194. Other patents pending.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

- 1. Purchase Order number under which the product was PURCHASED,
- Model and serial number of the product under warranty, and
 Repair instructions and/or specific problems relative to the product.
- 2. Model and serial number of the product, and

Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges.

3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2004 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.