

MATERIAL SAFETY DATA SHEET

TORGINOL® LV-AR42 TORGLAZE

SECTION 1 - PRODUCT INFORMATION

PRODUCT NAME:	LV-AR42 TORGLAZE	DATE OF PREPARATION:	2/22/2007
PRODUCT TYPE:	COATING	PHYSICAL FORM:	SOLVENT
COMPANY ADDRESS:	TORGINOL, INC. P O 102 710 FOREST AVENUE SHEBOYGAN FALLS, WI 53085	TELEPHONE:	(800) 558-7596
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SECTION 2 - HAZARDOUS INGREDIENTS/COMPOSITION INFORMATION

INGREDIENT	% BY WGT	CAS NO.	ALLOWABLE EXPOSURE LEVEL			SKIN	SARA	VP
			PPM	MG/CU.M.	SEN		313	MM Hg @ 20 DEG.C
2,4 TOLUENE DIISOCYANATE	< 1	584-84-9	TLV-TWA	0.0050	0.0400	SEN	X	1
			TLV-STEL	0.0200	0.1400			
			OSHA-PEL	0.0050	0.0400			
			OSHA-STEL	0.0200	0.1500			
			LFL	10.0	UFL	10.0		
SOLVENT NAPHTHA LIGHT AROMATIC		64742-95-6	NONE ESTABLISHED			X	5	
PROPYLENE GLYCOL METHYL ETHER ACETATE		108-65-6	NONE ESTABLISHED				2	
PROPYLENE GLYCOL METHYL ETHER ACETATE		108-65-6	NONE ESTABLISHED				2	
PARACHLORO BENZOTRI- FLUORIDE		TSRN7010S01	MFR	25				
TERT BUTYL ACETATE		540-88-5	TLV-TWA	200			SKIN	
			OSHA-PEL	200				
			LFL	1.5				

LFL = LOWER FLAMMABILITY LIMIT PERCENT
 UFL = UPPER FLAMMABILITY LIMIT PERCENT
 SKIN = SKIN ABSORPTION MUST BE CONSIDERED AS A ROUTE OF EXPOSURE
 C-CEILING = ALLOW. EXPOSURE LEVEL SHOULD NOT BE EXCEEDED FOR ANY TIME PERIOD.
 MFR = MANUFACTURER RECOMMENDED EXPOSURE LIMIT
 STEL = SHORT TERM EXPOSURE LIMIT
 X-SARA 313 = CHEMICAL IS SUBJECT TO REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF S.A.R.A. 40 CFR PART 372

SECTION 3 - HAZARDS IDENTIFICATION

EFFECTS OF SHORT TERM OVER EXPOSURE

SWALLOWING

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, AND VOMITING. ASPIRATION OF MATERIAL INTO LUNG MAY CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

INHALATION

MAY CAUSE RESPIRATORY SENSITIZATION (POTENTIAL FOR ALLERGIC REACTION).
 MAY CAUSE THROAT OR NOSE IRRITATION. HIGH CONCENTRATION MAY CAUSE ACUTE CENTRAL NERVOUS SYSTEM DEPRESSION CHARACTERIZED BY HEADACHES, DIZZINESS, NAUSEA AND CONFUSION.

EYE

MAY CAUSE SEVERE EYE IRRITATION.

SKIN

PRIMARY SKIN IRRITANT.
 MAY CAUSE SKIN SENSITIZATION (ALLERGIC REACTION).
 MAY CAUSE SEVERE SKIN IRRITATION

EFFECTS OF REPEATED EXPOSURE

REPEATED EXPOSURE TO DIISOCYANATES MAY RESULT IN SKIN AND RESPIRATORY SENSITIZATION IN SOME INDIVIDUALS. RESPIRATORY RESULTS IN ASTHMA-LIKE SYMPTOMS ON SUBSEQUENT EXPOSURE AT CONCENTRATIONS EVEN BELOW THE TLV. THE SUPPLIER REPORTS THAT REPEATED EXCESSIVE OVEREXPOSURE MAY CAUSE LIVER AND KIDNEY DAMAGE. REPORTS HAVE ASSOCIATED PROLONGED AND REPEATED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

AVOID CONTACT. REFER TO SECTION 8 FOR EXPOSURE CONTROL. DO NOT STORE ABOVE 115 deg. F (46 deg. C) STORE LARGE QUANTITIES IN COMPLIANCE WITH OSHA 29CFR1910.106.

OTHER PRECAUTIONS

DO NOT TAKE INTERNALLY. CLOSE CONTAINER AFTER EACH USE. AVOID SKIN CONTACT. EMPTY CONTAINERS MUST NOT BE WASHED AND RE-USED FOR ANY PURPOSE. CONTAINERS SHOULD BE GROUNDED AND BONDED TO THE RECEIVING CONTAINER. DO NOT WELD, BRAZE OR CUT ON EMPTY CONTAINER. NEVER USE PRESSURE TO EMPTY. DRUM IS NOT A PRESSURE VESSEL.

SECTION 8 - EXPOSURE CONTROLS

RESPIRATORY PROTECTION

THE ABSENCE OF HEAT OR AEROSOL GENERATION REDUCES THE LIKELIHOOD OF THE NEED FOR RESPIRATORY PROTECTION. SINCE THE CONDITIONS OF USE VARY, IT IS THE RESPONSIBILITY OF EACH USER OF THIS PRODUCT TO EVALUATE POTENTIAL EXPOSURES WITHIN THEIR FACILITY. IF SUCH CONDITIONS INDICATE THE NEED FOR RESPIRATORY PROTECTION, PROPER SELECTION DEPENDS UPON MANY FACTORS INCLUDING DURATION AND LEVEL OF EXPOSURE AND CONDITIONS OF USE. IN GENERAL, EXPOSURE TO THE SUBSTANCES LISTED IN SECTION II OF THIS MSDS MAY NOT REQUIRE THE USE OF RESPIRATORY PROTECTION IF EXPOSURES ARE MAINTAINED BELOW RECOMMENDED EXPOSURE LIMITS. THIS CAN BE ACCOMPLISHED BY THE USE OF ENGINEERING CONTROLS.

ONE EXAMPLE OF SUCH CONTROLS WOULD BE THE USE OF PROPERLY DESIGNED VENTILATION SYSTEMS. IF A RESPIRATOR IS TO BE WORN, A NIOSH APPROVED RESPIRATOR WITH AN APPROPRIATE PROTECTION FACTOR SHOULD BE PROVIDED. IF EXPOSURES ARE DETERMINED TO BE EXCESSIVE, OR IF THE USE OF RESPIRATORS IS DESIRED A POSITIVE PRESSURE SUPPLIED AIR RESPIRATOR WILL PROVIDE ADEQUATE VENTILATION. THE USE OF AIR PURIFYING RESPIRATORS MAY ALSO BE SUITABLE IN SOME SITUATIONS.

PLEASE REFER TO THE AMERICAN INDUSTRIAL HYGIENE ASSOCIATION JOURNAL J. 47(7) : 393-398 (1986). CONSULT A QUALIFIED OCCUPATIONAL HEALTH AND SAFETY PROFESSIONAL REGARDING CONDITION OF USE WITHIN YOUR FACILITY. REFER TO OSHA CFR 1910.134 "RESPIRATORY PROTECTION" AND RESPIRATORY PROTECTION: A MANUAL AND GUIDELINE, AMERICAN INDUSTRIAL HYGIENE ASSOCIATION."

VENTILATION

PROVIDE LOCAL EXHAUST VENTILATION IN SUFFICIENT VOLUME AND PATTERN SO AS TO MAINTAIN EXPOSURES BELOW NUISANCE DUST LIMITS AND PERMISSIBLE EXPOSURE LIMITS WHICH MAY BE LISTED SECTION II. REFER TO INDUSTRIAL VENTILATION - A MANUAL FOR RECOMMENDED PRACTICE - AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS.

HAND PROTECTION

SOLVENT IMPERMEABLE GLOVES ARE REQUIRED FOR IMMEDIATE OR PROLONGED CONTACT. REFER TO GLOVE MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.

EYE PROTECTION

WEAR SAFETY GLASSES MEETING THE SPECIFICATIONS OF ANSI Z87.1 WHERE NO CONTACT WITH THE EYE IS ANTICIPATED. CHEMICAL SAFETY GOGGLES MEETING THE SPECIFICATIONS OF ANSI Z87.1 SHOULD BE WORN WHENEVER THERE IS A POSSIBILITY OF SPLASHING OR OTHER CONTACT WITH THE EYES.

OTHER PROTECTIVE EQUIPMENT

EYE WASH FACILITY, SAFETY SHOWER. REMOVE AND WASH CONTAMINATED CLOTHING BEFORE RE-USE. DISCARD CONTAMINATED SHOES.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	NOT APPLICABLE	% VOLATILE BY VOLUME:	58
VAPOR DENSITY:	HEAVIER THAN AIR		
EVAPORATION RATE:	VOC 2.41 lb/gal LESS WATER& NPRS*	289 g/l LESS WATER	CALCULATED
	SLOWER THAN DIETHYL ETHER.		
WEIGHT LB./GAL.	8.5 VOC 3.90 lb/gal SOLIDS	468 g/l SOLIDS	CALCULATED
	SPECIFIC GRAVITY 1.0		

ALL PHYSICAL DATA DETERMINED AT 68 DEG. F. (20 DEG. C.) 760 mm Hg

* NEGLIGIBLY PHOTOCHEMICALLY REACTIVE MATERIALS

SECTION 10 - STABILITY & REACTIVITY

STABILITY: NORMALLY STABLE

CONDITIONS TO AVOID:

AVOID EXCESSIVE HEAT (>115 deg. F (46 deg. C)) AND SOURCES OF IGNITION.

INCOMPATIBILITY (MATERIALS TO AVOID):

WATER, ALCOHOLS AND STRONG ACIDS OR ALKALINE MATERIALS. OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

BURNING, INCLUDING WHEN HEATED BY WELDING OR CUTTING, WILL PRODUCE SMOKE, CARBON MONOXIDE AND CARBON DIOXIDE. IN ADDITION, OXIDES OF NITROGEN MAY BE GENERATED. THE REACTION OF ISOCYANATES WITH WATER MAY PRODUCE CARBON DIOXIDE GAS WHICH MAY RESULT IN CONTAINER PRESSURIZATION.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: NONE KNOWN

SECTION 11 - TOXICOLOGICAL INFORMATION & SECTION 12 - ECOLOGICAL INFORMATION

NO DATA AVAILABLE

SECTION 13 - DISPOSAL CONSIDERATIONS

SEE SECTION 6

SECTION 14 - TRANSPORT INFORMATION

<u>ITEM:</u>	<u>LV-AR42 TORGLAZE</u>	<u>DESC/SIZE:</u>	<u>MOISTURE CURE URETHANE</u>		
<u>MODE</u>	<u>PROPER SHIPPING NAME</u>		<u>CLASS</u>	<u>LD#</u>	<u>PKG GRP.</u>
IATA (AIR)	LIMITED TO SMALL QUANTITIES ONLY CANNOT BE SHIPPED IN THIS CONFIGURATION				
DOT (HM-181) (DOMESTIC SURFACE)	RESIN SOLUTION NAERG: 127		3	UN1866	III
IMDG CODE (OCEAN)	RESIN SOLUTION		3	UN1866	III

NOTE! THE ASSIGNMENT OF PROPER SHIPPING NAMES IS IN PART A FUNCTION OF THE SIZE OF THE PRODUCT CONTAINER AND THE TRANSPORT MODE. FOR EXAMPLE, THE PROPER SHIPPING NAME FOR A BULK CONTAINER CAN DIFFER SIGNIFICANTLY FROM THE PROPER SHIPPING NAME FOR THE SAME PRODUCT PACKAGED IN A NON-BULK CONTAINER. THIS CAN ALSO BE TRUE FOR PRODUCTS SHIPPED VIA DIFFERENT MODES OF TRANSPORTATION (i.e. GROUND, AIR, OCEAN) . THE DESCRIPTIONS PROVIDED ABOVE ARE INTENDED TO PROVIDE SOME GUIDANCE. HOWEVER, THESE DESCRIPTIONS MAY NOT APPLY TO YOUR PACKAGE SIZE OR MODE OF SHIPMENT.

THE U.S. CODE OF FEDERAL REGULATIONS, 49 CFR - TRANSPORTATION, REGULATIONS, AND THE POLICIES ESTABLISHED BY SOME TRANSPORTERS, REQUIRE THAT THE SHIPPER PROPERLY CLASSIFY AND ASSIGN A PROPER SHIPPING NAME, AND LABEL, MARK AND PACKAGE THE MATERIAL PROPERLY. THEREFORE, THE USER OF THIS INFORMATION IS CAUTIONED TO CONSULT WITH APPLICABLE REGULATIONS, AND WITH QUALIFIED ADVISORS PRIOR TO THE REPACKAGING AND/OR RESHIPMENT OF THIS OR ANY OTHER PRODUCT WHICH CONTAINS THIS PRODUCT.

SECTION 15 - REGULATORY INFORMATION

ALL INGREDIENTS IN THIS PRODUCT ARE LISTED ON THE US TSCA INVENTORY.

WARNING: THIS PRODUCT CONTAINS **2,4 TOLUENE DIISOCYANATE**; A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER,

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>DETAIL INVENTORY LIST INFORMATION</u>
2,4 TOLUENE DIISOCYANATE	584-84-9	TSCA (8a CAIR) TSCA (8d) DSL
SOLVENT NAPHTHA LIGHT AROMATIC	64742-95-6	TSCA (8d) DSL
PROPYLENE GLYCOL METHYL ETHER ACETATE	108-65-6	TSCA (8a PAIR) TSCA (8d) TSCA (8d term) DSL
PARACHLORO BENZOTRI- FLUORIDE	TSRN7010S01	TSCA TSCA (8a PAIR) TSCA (8d) NDSL
TERT BUTYL ACETATE	540-88-5	TSCA(8a PAIR) TSCA(8d) DSL

DETAIL INVENTORY LIST DESCRIPTION
TSCA /TOXIC SUBSTANCE CONTROL ACT
(8a CAIR) COMPREHENSIVE ASSESSMENT INFORMATION RULES
(8a PAIR) PRELIMINARY ASSESSMENT INFORMATION RULES
(8d) HEALTH AND SAFETY REPORTING RULES
(8d term) HEALTH AND SAFETY REPORTING RULES TERMINATION
DSL/CANADIAN DOMESTIC SUBSTANCE LIST
NDSL / CANADIAN NON - DOMESTIC SUBSTANCE LIST