

MATERIAL SAFETY DATA SHEET

TORGINOL® 1600C TORGLAZE

SECTION 1 - PRODUCT & COMPANY INFORMATION

PRODUCT NAME:	1600C TORGLAZE	DATE OF PREPARATION:	1/6/2006
PRODUCT TYPE:	COATING	PHYSICAL FORM:	SOLVENT
COMPANY ADDRESS:	TORGINOL, INC. P O BOX 102 710 FOREST AVENUE SHEBOYGAN FALLS, WI 53085	TELEPHONE:	(800) 558-7596
		EMERGENCY TELEPHONE:	(800) 688-4005

SECTION 2 - HAZARDOUS INGREDIENTS/COMPOSITION INFORMATION

INGREDIENT:	% BY WGT	CAS NO.	ALLOWABLE EXPOSURE LEVEL			SARA 313	VP MM Hg @ 20 DEG.C
			PPM MG/CU.M.				
						SKIN	
POLYURETHANE PREPOLYMER		TSRNHM2801	NONE ESTABLISHED				
XYLENE	50	1330-20-7	TLV-TWA	100	435	X	5
			TLV-STEL	150	655		
			OSHA-PEL	100	435		
			OSHA-STEL	150	655		
			LFL	1.0	UFL	7.0	
ETHYL BENZENE	10	100-41-4	TLV-TWA	100	435	X	1
			TLV-STEL	125	545		
			OSHA-PEL	100	435		
			OSHA-STEL	125	545		SKIN
			LFL	1.0	UFL	6.7	

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 37;

SECTION 3 - HAZARDS IDENTIFICATION

H.M.I.S

HEALTH	3*	THESE RATINGS SHOULD BE USED ONLY AS PART OF FULL IMPLEMENTED H.M.I.S. PROGRAM
FLAMMABILITY	3	
REACTIVITY	1	

EFFECTS OF SHORT TERM OVER EXPOSURE

SWALLOWING

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

INHALATION

WARNING: VAPOR AND SPRAY MIST HARMFUL. OVER EXPOSURE MAY CAUSE LUNG DAMAGE. MAY CAUSE LUNG IRRITATION AND ALLERGIC RESPIRATORY REACTION. EFFECTS MAY BE PERMANENT.

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

OVEREXPOSURE TO XYLENE MAY CAUSE INJURY TO THE LIVER, KIDNEYS AND BLOOD.

REPEATED EXPOSURE TO ISOCYANATES MAY RESULT IN SKIN AND RESPIRATORY SENSITIZATION IN SOME INDIVIDUALS. RESPIRATORY SENSITIVITY RESULTS IN ASTHMA-LIKE SYMPTOMS ON SUBSEQUENT EXPOSURE AT CONCENTRATIONS EVEN BELOW THE TLV.

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.

SECTION 4 - FIRST AID MEASURES

SWALLOWING	IF SWALLOWED DO NOT INDUCE VOMITING. (NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON). CALL POISON CONTROL CENTER, HOSPITAL EMERGENCY ROOM, OR PHYSICIAN IMMEDIATELY.
INHALATION	REMOVE TO FRESH AIR IMMEDIATELY. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION. KEEP WARM AND QUIET. GET MEDICAL ATTENTION IMMEDIATELY.
EYE	FLUSH WITH LARGE AMOUNTS OF WATER, LIFTING UPPER AND LOWER LIDS OCCASIONALLY. CONTINUE FOR AT LEAST 15 MINUTES. GET MEDICAL ATTENTION IMMEDIATELY.
SKIN	REMOVE CONTAMINATED CLOTHING. WASH AFFECTED AREA WITH SOAP AND WATER. OBTAIN MEDICAL ATTENTION IF IRRITATION PERSISTS.
NOTES TO PHYSICIAN	ANY TREATMENT THAT MIGHT BE REQUIRED FOR OVEREXPOSURE SHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITIONS.

SECTION 5 - FIRE FIGHTING MEASURES

NFPA FLAMMABILITY CLASSIFICATION **FLAMMABLE LIQUID - CLASS IC**

FLASHPOINT 82 DEG.F,SFCC (28 DEG.C.)

EXTINGUISHING MEDIA:

USE NFPA CLASS B FIRE EXTINGUISHERS (CARBON DIOXIDE, ALL PURPOSE DRY CHEMICAL OR ALCOHOL FOAM) DESIGNED TO EXTINGUISH FLAMMABLE LIQUID FIRES. POLYMER FOAM IS DESIGNED FOR LARGE FIRES.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

DURING EMERGENCY CONDITIONS, OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

WARNING! FLAMMABLE

SPECIAL FIRE FIGHTING PROCEDURES

FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS.

WATER MAY BE INEFFECTIVE, BUT MAY BE USED TO COOL EXPOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTO-IGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT. IF WATER IS USED, FOG NOZZLES ARE PREFERABLE.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

THE USE OF NIOSH/MSHA APPROVED, TC19C, AIR-SUPPLIED BREATHING APPARATUS MAY BE REQUIRED. CONSULT WITH A QUALIFIED OCCUPATIONAL HEALTH AND/OR SAFETY PROFESSIONAL.

RESORT TO SECTION 8 AND DON RESPIRATORS, EYE, HAND, AND BODY PROTECTION APPROPRIATE FOR THE SIZE OF THE SPILL AND THE EXPOSURE ENCOUNTERED. KEEP SPECTATORS AWAY. ELIMINATE ALL IGNITION SOURCES (FLAMES, HOT SURFACES, AND SOURCES OF ELECTRICAL, STATIC, OR FRICTIONAL SPARKS). DIKE AND CONTAIN SPILL WITH INERT MATERIAL (E.G SAND, EARTH). TRANSFER LIQUIDS TO COVERED METAL CONTAINERS FOR RECOVERY OR DISPOSAL, OR REMOVE WITH INERT ABSORBENT. USE ONLY NON-SPARKING TOOLS. PLACE ABSORBENT DIKING MATERIALS IN COVERED METAL CONTAINERS FOR DISPOSAL. PREVENT CONTAMINATION OF SEWERS, STREAMS, AND GROUNDWATER WITH SPILLED MATERIAL OR USED ABSORBENT.

WASTE DISPOSAL

DISPOSE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

RCRA CLASSIFICATION

THIS PRODUCT, IF DISCARDED DIRECTLY, WOULD BE CLASSIFIED AS A HAZARDOUS WASTE BASED ON IT'S IGNITABILITY CHARACTERISTICS, I.E HAS A FLASH POINT OF 140 deg. F. (60 deg. C) OR LESS. THE PROPER RCRA CLASSIFICATION WOULD BE D001.

ENVIRONMENTAL HAZARDS

NONE KNOWN

SECTION 7 - HANDLING & STORAGE

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. THIS PRODUCT SHOULD NOT BE USED BY PERSONS WHO HAVE HAD CHRONIC (LONG TERM) BREATHING PROBLEMS OR REACTIONS TO ISOCYANATES. DO NOT BREATHE VAPOR, SPRAY, OR MIST. DO NOT GET IN EYES, SKIN, OR CLOTHING. WASH THOROUGHLY AFTER HANDLING. KEEP AWAY FROM HEAT, SPARKS, OR FLAMES. USE ONLY WITH ADEQUATE VENTILATION.

SECTION 7 - HANDLING & STORAGE (CONT'D)

OTHER PRECAUTIONS (CONT'D)

WASH HANDS AND FACE THOROUGHLY BEFORE EATING OR DRINKING. 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

PROPER SELECTION OF RESPIRATORY DEPENDS ON MANY FACTORS INCLUDING DURATION/LEVEL OF EXPOSURE AND CONDITIONS OF USE. IN GENERAL EXPOSURE TO ORGANIC CHEMICALS SUCH AS THOSE CONTAINED IN THIS PRODUCT MAY NOT REQUIRE THE USE OF RESPIRATORY PROTECTION IF USED IN WELL VENTILATED AREAS. IN RESTRICTED VENTILATION AREAS A NIOSH APPROVED CHEMICAL CARTRIDGE RESPIRATOR MAY BE REQUIRED. UNDER CERTAIN CONDITIONS, SUCH AS SPRAYING, A MECHANICAL PREFILTER MAY ALSO BE REQUIRED. IN CONFINED AREAS USE A NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR. IF THE TLV'S LISTED IN SECTION 2 ARE EXCEEDED USE A PROPERLY FITTED NIOSH/MSHA APPROVED RESPIRATOR WITH AN APPROPRIATE PROTECTION FACTOR. REFER TO OSHA 29 CFR 1910.134 "RESPIRATORY PROTECTION", AND "RESPIRATORY PROTECTION A MANUAL AND GUIDLEINE, AMERICAN INDUSTRIAL HYGIENE ASSOC."

VENTILATION

PROVIDE GENERAL DILUTION AND LOCAL EXHAUST VENTILATION IN SUFFICIENT VOLUME AND PATTERN TO KEEP CONCENTRATIONS OF HAZARDOUS INGREDIENTS LISTED IN SECTION 2 BELOW THE LOWEST EXPOSURE LIMIT STATED. REMOVE DECOMPOSITION PRODUCTS THAT ARE GENERATED WHEN WELDING, CUTTING, OR BRAZING OBJECTS COATED WITH THIS PRODUCT. REFER TO "INDUSTRIAL VENTILATION - A MANUAL OF RECOMMENDED PRACTICE" ACGIH

HAND PROTECTION

BUTYL RUBBER
NITRILE GLOVES

WEAR APPROPRIATE IMPERMEABLE GLOVES.

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. AS REQUIRED TO PREVENT SKIN CONTACT.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

BOILING RANGE:	NOT APPLICABLE				
VAPOR DENSITY:	HEAVIER THAN AIR		% VOLATILE BY VOLUME:		68
EVAPORATION RATE:	VOC 4.80 lb/gal	LESS WATER & NPRS*	576 g/l LESS WATER	CALCULATED	
	SLOWER THAN DIETHYL ETHER.				
WEIGHT LB./GAL.:	8.0	VOC 15.00 lb/gal	SOLIDS	1800 g/l LESS WATER	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

STABILITY: NORMALLY STABLE

CONDITIONS TO AVOID:

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

INCOMPATIBILITY (MATERIALS TO AVOID):

STRONG ACIDS OR ALKALINE 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.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID: NONE KNOWN

SECTION 11 - TOXICOLOGICAL INFORMATION

NO DATA AVAILABLE.

SECTION 12 - ECOLOGICAL INFORMATION

NO DATA AVAILABLE

SECTION 13 - DISPOSAL CONSIDERATIONS

SEE SECTION 6

SECTION 14 - TRANSPORT INFORMATION

ITEM: #1600C TORGLAZE	DESC/SIZE: #1600C PAIL/40 LB			
MODE	PROPER SHIPPING NAME	CLASS	I.D#	PKG GRP.
DOT (HM-181)	RESIN SOLUTION NAERG: FE,SE	3	UN1866	III

(DOMESTIC SURFACE)

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 IN THE US TSCA INVENTORY.

WARNING: THIS PRODUCT CONTAINS **ETHYL BENZENE**; A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>DETAIL INVENTORY LIST INFORMATION</u>
POLYURETHANE PREPOLYMER	TSRNM2801	TSCA NDSL
XYLENE	1330-20-7	TSCA (8a PAIR) DSL
ETHYL BENZENE	100-41-4	TSCA (4a) TSCA (8a PAIR) TSCA (8d) DSL

DETAIL INVENTORY LIST DESCRIPTION

TSCA /TOXIC SUBSTANCE CONTROL ACT

(4a) TSCA 4a

(8a PAIR) PRELIMINARY ASSESSMENT INFORMATION RULES

(8d) HEALTH AND SAFETY REPORTING RULES

DSL/CANADIAN DOMESTIC SUBSTANCE LIST

NDSL/CANADIAN NON-DOMESTIC SUBSTANCE LIST