

**SECTION 1**

PRODUCT IDENTIFIER 1793 ICI COLORANT THALO BLUE (TBL)  
 - PHTHALO BLUE (T-BL)

DATE OF PREPARATION JULY 21, 2007

PRODUCT USE PROTECTIVE COATING

MANUFACTURED BY: ICI PAINTS NORTH AMERICA, 15885 WEST SPRAGUE ROAD,  
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EMERGENCY AND MSDS TELEPHONE NUMBER:  
 1-800-545-2643

MSDS PREPARED BY: PRODUCT SAFETY AND TOXICOLOGY DEPARTMENT  
 ICI PAINTS NORTH AMERICA

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

	INGREDIENT	WT. %:
CHEMICAL NAME	1,2-ETHANEDIOL	20-30
COMMON NAME :	ETHYLENE GLYCOL	
CAS NUMBER:	107-21-1	
CHEMICAL NAME	ETHANOL, 2,2'-IMINOBIIS	.1-1.0
COMMON NAME :	DIETHANOLAMINE	
CAS NUMBER:	111-42-2	
CHEMICAL NAME	POLY(OXY-1,2-ETHANEDIYL, ALPHA-4-NONYLPHENYL)- OMEGA-HYDROXY-, BRANCHED	5-10
COMMON NAME :	GLYCOL ETHER	
CAS NUMBER:	127087-87-0	
CHEMICAL NAME	KAOLIN	30-40
COMMON NAME :	CLAY	
CAS NUMBER:	1332-58-7	
CHEMICAL NAME	9-OCTADECENOIC ACID, 12-HYDROXY-, METHYL ESTER, (R-(Z))-	1-5
COMMON NAME :	MALEIC RICINOLEATE POLYESTER PLASTICIZER	
CAS NUMBER:	141-24-2	
CHEMICAL NAME	COPPER, {29H, 31H-PHTHALOCYANINATO(2-)N29,N30,N31, N32}-, (SP-4-1)-	5-10
COMMON NAME :	PHTHALOCYANINE BLUE PIGMENT	
CAS NUMBER:	147-14-8	
CHEMICAL NAME	1,2-PROPANEDIOL	1-5
COMMON NAME :	PROPYLENE GLYCOL	
CAS NUMBER:	57-55-6	
CHEMICAL NAME	WATER	10-20
COMMON NAME :	WATER	
CAS NUMBER:	7732-18-5	
CHEMICAL NAME	LECITHINS	1-5
COMMON NAME :	LECITHIN	
CAS NUMBER:	8002-43-5	
CHEMICAL NAME	2-PYRROLIDINONE, 1-METHYL-	1-5
COMMON NAME :	N-METHYLPYRROLIDONE	
CAS NUMBER:	872-50-4	

**SECTION 3: HAZARDS IDENTIFICATION**

## PRIMARY ROUTE(S) OF EXPOSURE

INHALATION, SKIN CONTACT, EYE CONTACT, INGESTION.

## EFFECTS OF OVEREXPOSURE

## INHALATION

PROLONGED INHALATION MAY LEAD TO MUCOUS MEMBRANE IRRITATION, DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, NAUSEA, CENTRAL NERVOUS SYSTEM DEPRESSION, CONFUSION, BLOOD ABNORMALITIES, KIDNEY DAMAGE, PNEUMOCONIOSIS, LOSS OF CONSCIOUSNESS.

## SKIN CONTACT

IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE DERMATITIS, DEFATTING. POSSIBLE SENSITIZATION TO SKIN. SKIN CONTACT MAY RESULT IN DERMAL ABSORPTION OF COMPONENT(S) OF

THIS PRODUCT WHICH MAY CAUSE HEADACHE, NAUSEA, CENTRAL NERVOUS SYSTEM DEPRESSION.

EYE CONTACT	IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN CAUSE CONJUNCTIVITIS, TEARING OF EYES, REDNESS OF EYES, SEVERE EYE IRRITATION.
INGESTION	INGESTION MAY CAUSE LUNG INFLAMMATION AND DAMAGE DUE TO ASPIRATION OF MATERIAL INTO LUNGS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, NAUSEA, VOMITING, DIARRHEA, GASTRO-INTESTINAL DISTURBANCES, SEVERE ABDOMINAL PAIN, APATHY, CENTRAL NERVOUS SYSTEM DEPRESSION, RESPIRATORY PROBLEMS, INTOXICATION, KIDNEY DAMAGE, PULMONARY EDEMA, LOSS OF CONSCIOUSNESS, ACUTE POISONING, RESPIRATORY FAILURE, CARDIAC FAILURE, BRAIN DAMAGE.
MEDICAL CONDITIONS	AGGRAVATED BY EXPOSURE EYE, SKIN, RESPIRATORY DISORDERS, LUNG DISORDERS, KIDNEY DISORDERS.

#### SECTION 4: FIRST-AID MEASURES

INHALATION	REMOVE TO FRESH AIR. RESTORE AND SUPPORT CONTINUED BREATHING. GET EMERGENCY MEDICAL ATTENTION. HAVE TRAINED PERSON GIVE OXYGEN IF NECESSARY. GET MEDICAL HELP FOR ANY BREATHING DIFFICULTY.
SKIN CONTACT	WASH THOROUGHLY WITH SOAP AND WATER. IF ANY PRODUCT REMAINS, GENTLY RUB PETROLEUM JELLY, VEGETABLE OR MINERAL/BABY OIL ONTO SKIN. REPEATED APPLICATIONS MAY BE NEEDED. REMOVE CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE RE-USE. IF IRRITATION OCCURS, CONSULT A PHYSICIAN.
EYE CONTACT	FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER, ESPECIALLY UNDER LIDS FOR AT LEAST 15 MINUTES. IF IRRITATION OR OTHER EFFECTS PERSIST, OBTAIN MEDICAL TREATMENT.
INGESTION	IF SWALLOWED, OBTAIN MEDICAL TREATMENT IMMEDIATELY.

#### SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT (SETA)	NONE	LOWER EXPLOSIVE LIMIT	NOT AVAILABLE
		UPPER EXPLOSIVE LIMIT	15.3 (%)
FIRE EXTINGUISHING MEDIA	DRY CHEMICAL OR FOAM WATER FOG. CARBON DIOXIDE.		
UNUSUAL FIRE AND EXPLOSION HAZARDS	CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT OR FIRE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL LONG DISTANCES TO A SOURCE OF IGNITION AND FLASH BACK. VAPORS CAN FORM EXPLOSIVE MIXTURES IN AIR AT ELEVATED TEMPERATURES. CLOSED CONTAINERS MAY BURST IF EXPOSED TO EXTREME HEAT OR FIRE.		
FIRE FIGHTING PROCEDURES	WATER MAY BE USED TO COOL AND PROTECT EXPOSED CONTAINERS. FIREFIGHTERS SHOULD USE FULL PROTECTIVE CLOTHING, EYE PROTECTION, AND SELF-CONTAINED BREATHING APPARATUS.		
HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS	CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF NITROGEN, PHOSPHOROUS, TOXIC GASES, SMOKE AND SOOT. PROPIONALDEHYDE		

#### SECTION 6 ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	COMPLY WITH ALL APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS.
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ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA. SPILLS MAY BE COLLECTED WITH ABSORBENT MATERIALS. EVACUATE ALL UNNECESSARY PERSONNEL. PLACE COLLECTED MATERIAL IN PROPER CONTAINER. SPILLED MATERIAL IS EXTREMELY SLIPPERY. COMPLETE PERSONAL PROTECTIVE EQUIPMENT MUST BE USED DURING CLEANUP.

LARGE SPILLS - SHUT OFF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN SPILL. PUMP TO STORAGE OR SALVAGE VESSELS. USE ABSORBENT TO PICK UP EXCESS RESIDUE. KEEP SALVAGEABLE MATERIAL AND RINSE WATER OUT OF SEWERS AND WATER COURSES. SMALL SPILLS - USE ABSORBENT TO PICK UP RESIDUE AND DISPOSE OF PROPERLY.

## SECTION 7 HANDLING AND STORAGE

### HANDLING AND STORAGE

STORE BELOW 100F (38C). KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. KEEP FROM FREEZING.

### OTHER PRECAUTIONS

USE ONLY WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. AVOID CONTACT WITH SKIN AND EYES, AND BREATHING OF VAPORS. WASH HANDS THOROUGHLY AFTER HANDLING, ESPECIALLY BEFORE EATING OR SMOKING. KEEP CONTAINERS TIGHTLY CLOSED AND UPRIGHT WHEN NOT IN USE. AVOID CONDITIONS WHICH RESULT IN FORMATION OF INHALABLE PARTICLES SUCH AS SPRAYING OR ABRADING (SANDING) PAINTED SURFACES. IF SUCH CONDITIONS CANNOT BE AVOIDED, USE APPROPRIATE RESPIRATORY PROTECTION AS DIRECTED UNDER EXPOSURE CONTROLS/PERSONAL PROTECTION. EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUES. GROUND EQUIPMENT WHEN TRANSFERRING TO PREVENT ACCUMULATION OF STATIC CHARGE.

## SECTION 8: EXPOSURE CONTROLS PERSONAL PROTECTION

COMMON NAME : ETHYLENE GLYCOL

CAS NUMBER: 107-21-1

ACGIH(STEL) : C 100 MG/M3

COMMON NAME : DIETHANOLAMINE

CAS NUMBER: 111-42-2

ACGIH(TWA) : SKIN 2 MG/M3

COMMON NAME : CLAY

CAS NUMBER: 1332-58-7

ACGIH(TWA) : 2 MG/M3 OSHA(TWA) : 5 MG/M3

### RESPIRATORY PROTECTION

CONTROL ENVIRONMENTAL CONCENTRATIONS BELOW APPLICABLE EXPOSURE STANDARDS WHEN USING THIS MATERIAL. WHEN RESPIRATORY PROTECTION IS DETERMINED TO BE NECESSARY, USE A NIOSH/MSHA (CANADIAN Z94.4) APPROVED ELASTOMERIC SEALING-SURFACE FACEPIECE RESPIRATOR OUTFITTED WITH ORGANIC VAPOR CARTRIDGES AND PAINT SPRAY (DUST/MIST) PREFILTERS. DETERMINE THE PROPER LEVEL OF PROTECTION BY CONDUCTING APPROPRIATE AIR MONITORING. CONSULT 29CFR1910.134 FOR SELECTION OF RESPIRATORS (CANADIAN Z94.4).

### VENTILATION

PROVIDE DILUTION VENTILATION OR LOCAL EXHAUST TO PREVENT BUILD-UP OF VAPORS.

### PERSONAL PROTECTIVE EQUIPMENT

EYE WASH, SAFETY SHOWER, SAFETY GLASSES OR GOGGLES. IMPERVIOUS GLOVES, IMPERVIOUS CLOTHING, BOOTS.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE:	NOT AVAILABLE	SPECIFIC GRAVITY:	1.399
BOILING RANGE (F/C):	212-400/100-204	WEIGHT PER GALLON:	11.65/ 13.99IMP
%VOLATILE BY VOLUME:	59.14		
PHYSICAL STATE:	LIQUID	APPEARANCE	BLUE
SOLUBILITY IN WATER:	NOT AVAILABLE	PH:	NOT AVAILABLE

**SECTION 10: STABILITY AND REACTIVITY**

## UNDER NORMAL CONDITIONS

STABLE

SEE SECTION 5 FIRE FIGHTING MEASURES

## MATERIALS TO AVOID

OXIDIZERS, REDUCING AGENTS, ALKALIS, NITRIC ACID,  
HYDROFLUORIC ACID, MINERAL ACIDS.

STYRENE MONOMER.

## CONDITIONS TO AVOID

ELEVATED TEMPERATURES, CONTACT WITH OXIDIZING AGENT,  
CONTAMINATION, FREEZING, OPEN FLAME.

## HAZARDOUS POLYMERIZATION

WILL NOT OCCUR

**SECTION 11: TOXICOLOGICAL INFORMATION**

COMMON NAME : ETHYLENE GLYCOL

CAS NUMBER: 107-21-1

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

LD50: 4700.00 MG/KG ORL RAT

LD50: 5500.00 MG/KG ORL MOU

COMMON NAME : DIETHANOLAMINE

CAS NUMBER: 111-42-2

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

LD50: 7.64 ML/KG SKN RBT

LD50: .62 ML/KG ORL RAT

COMMON NAME : GLYCOL ETHER

CAS NUMBER: 127087-87-0

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME : CLAY

CAS NUMBER: 1332-56-7

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME : MALEIC RICINOLEATE POLYESTER PLASTICIZER

CAS NUMBER: 141-24-2

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME : PHTHALOCYANINE BLUE PIGMENT

CAS NUMBER: 147-14-8

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

LD50: &gt;5000.00 MG/KG ORL RAT

COMMON NAME : PROPYLENE GLYCOL

CAS NUMBER: 57-55-6

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

LD50: 20.00 GM/KG ORL RAT

LD50: 20.80 GM/KG SKN RBT

COMMON NAME : LECITHIN

CAS NUMBER: 8002-43-5

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME : N-METHYLPYRROLIDONE

CAS NUMBER: 872-50-4

CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

LD50: 3914.00 MG/KG ORL RAT

LD50: 8.00 GM/KG SKN RBT

## SUPPLEMENTAL HEALTH INFORMATION

CONTAINS A CHEMICAL THAT MAY BE ABSORBED THROUGH SKIN.  
OTHER EFFECTS OF OVEREXPOSURE MAY INCLUDE TOXICITY TO LIVER,  
KIDNEY, REPRODUCTIVE SYSTEM.

## CARCINOGENICITY

NOTICE: IN A 2 YEAR STUDY CONDUCTED BY THE NATIONAL  
TOXICOLOGY PROGRAM (NTP), THERE WAS CLEAR EVIDENCE OF  
CARCINOGENIC ACTIVITY IN MALE AND FEMALE MICE DERMALLY  
EXPOSED TO DIETHANOLAMINE BASED ON DEVELOPMENT OF LIVER  
AND KIDNEY TUMORS. THERE WAS NO EVIDENCE OF CARCINOGENICITY  
IN EITHER MALE OR FEMALE RATS. THE RELEVANCE OF THIS STUDY  
TO HUMANS IS NOT KNOWN.

A DIETARY STUDY WITH NMP FOUND INCREASED LIVER TUMORS IN MALE AND FEMALE MICE GIVEN 1100 AND 1400 MG/KG BWT/DAY FOR 18 MONTHS, RESPECTIVELY. SINCE LIVER TUMORS ARE COMMONLY REPORTED WHEN NON-GENOTOXIC CHEMICALS ARE TESTED IN THE MOUSE BIOASSAY, THE RELEVANCE TO HUMANS IS UNKNOWN.

**REPRODUCTIVE EFFECTS**

NMP MAY ADVERSELY AFFECT REPRODUCTION IN THE RAT AFTER INGESTION, ALTHOUGH FERTILITY IS UNALTERED. THESE EFFECTS OCCURRED AT EXPOSURES WHICH ALSO CAUSED MILD GENERALIZED EFFECTS IN THE PARENTAL ANIMALS. IT IS THEREFORE UNCLEAR IF NMP SPECIFICALLY TARGETS THE REPRODUCTIVE SYSTEM OR WHETHER THESE CHANGES WERE SECONDARY TO OTHER SYSTEMIC EFFECTS. FETAL EFFECTS INCLUDING DELAYED DEVELOPMENT, SOFT TISSUE VARIATIONS AND SKELETAL VARIATIONS WERE OBSERVED IN PREGNANT ANIMALS EXPOSED BY INGESTION, INHALATION AND SKIN CONTACT. WHILE THESE EVENTS GENERALLY OCCURRED IN THE PRESENCE OF MATERNAL TOXICITY, MILD FETOTOXICITY WAS SOMETIMES PRESENT IN THE ABSENCE OF MATERNAL EFFECTS. THE RELEVANCE OF THESE FINDINGS TO HUMANS IS UNKNOWN.

**MUTAGENICITY  
TERATOGENICITY**

NO MUTAGENIC EFFECTS ARE ANTICIPATED  
SOME LABORATORY TEST RESULTS HAVE SHOWN ETHYLENE GLYCOL TO BE AN ANIMAL TERATOGEN. HOWEVER, AN EXPERT PANEL CONVENED BY THE NATIONAL TOXICOLOGY PROGRAM'S CENTER FOR THE EVALUATION OF RISKS TO HUMAN REPRODUCTION (CERMR) CONDUCTED A REVIEW OF THE SCIENTIFIC LITERATURE AND CONCLUDED THAT ETHYLENE GLYCOL DOES NOT PRESENT A SIGNIFICANT CONCERN WITH RESPECT TO DEVELOPMENTAL AND REPRODUCTIVE TOXICITY IN HUMANS.

**SECTION 12: ECOLOGICAL INFORMATION**

NO ECOLOGICAL TESTING HAS BEEN DONE BY ICI PAINTS ON THIS PRODUCT AS A WHOLE.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL** DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.  
AVOID DISCHARGE TO NATURAL WATERS.

**SECTION 14: TRANSPORT INFORMATION**

DOT PAINT RELATED MATERIAL  
IMDG NOT AVAILABLE  
IATA NOT AVAILABLE  
TDG NOT AVAILABLE

**SECTION 15: REGULATORY INFORMATION**

	SARA	SARA	CERCLA	HAZ AIR	MARINE
	302	313	302.4	POLLUTANT	POLINT
CAS NUMBER: 107-21-1	NO	YES	YES	YES	NO
COMMON NAME : ETHYLENE GLYCOL					
CAS NUMBER: 111-42-2	NO	YES	NO	YES	NO
COMMON NAME : DIETHANOLAMINE					
CAS NUMBER: 127087-87-0	NO	YES	NO	YES	NO
COMMON NAME : GLYCOL ETHER					
CAS NUMBER: 872-50-4	NO	YES	NO	NO	NO
COMMON NAME : N-METHYLPYRROLIDONE					

AS OF THE DATE OF THIS MSDS, ALL OF THE COMPONENTS IN THIS PRODUCT ARE LISTED (OR ARE OTHERWISE EXEMPT FROM LISTING) ON THE TSCA INVENTORY.

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR (CONTROLLED PRODUCTS REGULATIONS) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

**SECTION 16: OTHER INFORMATION**

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE

1793 ICI COLORANT THALO BLUE (TBL)

AT THE TIME OF PREPARATION OF THIS DATA SHEET AND WHICH ICI  
PAINTS BELIEVES TO BE RELIABLE. HOWEVER, NO WARRANTY IS  
EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA.  
ICI PAINTS SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS  
INFORMATION, OR OF ANY PRODUCT, METHOD OR APPARATUS  
MENTIONED AND YOU MUST MAKE YOUR OWN DETERMINATION OF ITS  
SUITABILITY AND COMPLETENESS FOR YOUR OWN USE, FOR THE  
PROTECTION OF THE ENVIRONMENT, AND THE HEALTH AND SAFETY OF  
YOUR EMPLOYEES AND USERS OF THIS MATERIAL.  
COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD  
29CFR1910.1200.