MSDS for: LN-933 Revised: 24-Jun-2004

**SECTION 1:** 

CHEMICAL NAME:

COMMON NAME: CAS NUMBER:

PRODUCT IDENTIFIER: LN-933 GRANITE AND MARBLE ADHESIVE

DATE OF PREPARATION: JUNE 24, 2004 PRODUCT USE: ADHESIVE

MANUFACTURED BY: ICI PAINTS NORTH AMERICA

925 EUCLID AVENUE

CLEVELAND, OHIO 44115, U.S.A.

ICI PAINTS (CANADA) 8200 KEELE STREET

CONCORD, ONTARIO L4K 2A5, CANADA.

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**

70775-94-9

INGREDIENT		WT.%
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	BENZENE, 1,1'-METHYLENEBIS(4-ISOCYANATO- METHYLENE BISPHENYL ISOCYANATE 101-68-8	0.1-1.0
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	BENZENE, DIMETHYL- XYLENE 1330-20-7	5-10
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	TITANIUM DIOXIDE TITANIUM DIOXIDE 13463-67-7	10-20
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	DISTILLATES (PETROLEUM), HYDROTREATED LIGHT HYDROTREATED LIGHT DISTILLATE 64742-47-8	1-5
CHEMICAL NAME:  COMMON NAME:	POLY(OXY(METHYL-1,2-ETHANEDIYL)),ALPHA-HYDRO-OMEGA-ETHER WITH 2-ETHYL-2-(HYDROXYMETHYL)-1,3-PROPANEDIOPOLYMER WITH ALPHA-HYDO-OMEGA-HYDROXYPOLY(OXY(METHYETHANDIYL)) AND 1,1'-METHYLENEBIS(4-ISOCYANATOBENZE POLYURETHANE POLYMER	30-40
CAS NUMBER:	68130-40-5	

SULFONIC ACIDS, C10-18-ALKANE, PH ESTERS

SULFONIC ACIDS, C10-18-ALKANE, PH ESTERS

20-30

CHEMICAL NAME: ETHENE, CHLORO-, HOMOPOLYMER 20-30

COMMON NAME: POLYVINYL CHLORIDE

CAS NUMBER: 9002-86-2

#### **SECTION 3: HAZARDS IDENTIFICATION**

PRIMARY ROUTE(S) OF EXPOSURE: INHALATION, SKIN CONTACT, EYE CONTACT,

INGESTION

EFFECTS OF OVEREXPOSURE

INHALATION: IRRITATION OF RESPIRATORY TRACT. PROLONGED INHALATION

MAY LEAD TO LOSS OF APPETITE, MUCOUS MEMBRANE IRRITATION, FATIGUE, DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING, BLURRED VISION, COUGHING, DIFFICULTY WITH SPEECH, CENTRAL NERVOUS SYSTEM DEPRESSION, CONFUSION, ANESTHETIC EFFECT OR NARCOSIS, DIFFICULTY OF BREATHING, TREMORS, LIVER DAMAGE, KIDNEYDAMAGE, PULMONARY

EDEMA, CONVULSIONS, LOSS OF CONSCIOUSNESS, RESPIRATORY FAILURE, ASPHYXIATION, DEATH. POSSIBLE SENSITIZATION TO

RESPIRATORY TRACT.

SKIN CONTACT: IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN

CAUSE DERMATITIS, DEFATTING, BLISTERING. SKIN CONTACT MAY RESULT IN DERMAL ABSORPTION OF COMPONENT(S) OF THIS PRODUCT WHICH MAY CAUSE DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, CENTRAL NERVOUS SYSTEM DEPRESSION, CONFUSION, TREMORS,

CONVULSIONS.

EYE CONTACT: IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN

CAUSE CONJUNCTIVITIS, BLURRED VISION, TEARING OF EYES,

REDNESS OF EYES, SEVERE EYE IRRITATION.

INGESTION: INGESTION MAY CAUSE LUNG INFLAMMATION AND DAMAGE DUE

TO ASPIRATION OF MATERIAL INTO LUNGS, MUCOUS MEMBRANE IRRITATION, DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING, DIARRHEA, GASTRO-INTESTINAL DISTURBANCES, CENTRAL NERVOUS SYSTEM DEPRESSION, LIVER DAMAGE, KIDNEY DAMAGE, PULMONARY

EDEMA, CONVULSIONS, DEATH.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

EYE, SKIN, RESPIRATORY 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. REMOVE TO FRESH AIR IF

INHALATION CAUSES EYE WATERING, HEADACHES, DIZZINESS, OR

OTHER DISCOMFORT.

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.

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): 104 F./ 40 C. LOWER EXPLOSIVE LIMIT: NOT AVAILABLE

UPPER EXPLOSIVE LIMIT: NOT AVAILABLE

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. MAY DECOMPOSE UNDER FIRE CONDITIONS EMITTING IRRITANT AND/OR TOXIC GASES.

# 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, HYDROGEN CHLORIDE, TOXIC GASES

# SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

COMPLY WITH ALL APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA. VENTILATE AREA WITH EXPLOSION-PROOF EQUIPMENT. SPILLS MAY BE COLLECTED WITH ABSORBENT MATERIALS. EVACUATE ALL UNNECESSARY PERSONNEL. PLACE COLLECTED MATERIAL IN PROPER CONTAINER. 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 SALVAGEABLEMATERIAL 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.

#### 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. EMPTY CONTAINERS MAY CONTAIN HAZARDOUS RESIDUES.GROUND EQUIPMENT WHEN TRANSFERRING TO PREVENT ACCUMULATION OF STATIC CHARGE.

#### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

COMMON NAME: METHYLENE BISPHENYL ISOCYANATE

CAS NUMBER: 101-68-8 ACGIH(TWA): 0.005 PPM

OSHA( (SKIN): CEILING: 0.02 PPM SUPP REC STD.: NOT AVAILABLE

COMMON NAME: XYLENE CAS NUMBER: 1330-20-7

ACGIH(TWA): 100 PPM OSHA(TWA): 100 PPM

ACGIH(STEL): 150 PPM

COMMON NAME: TITANIUM DIOXIDE

CAS NUMBER: 13463-67-7

ACGIH(TWA): 10 MG/M3 OSHA(TWA): 10 MG/M3

COMMON NAME: HYDROTREATED LIGHT DISTILLATE

CAS NUMBER: 64742-47-8

ACGIH(TWA): 100PPM OSHA(TWA): 100 PPM

# RESPIRATORY PROTECTION

RESPIRATORY PROTECTION IS REQUIRED FOR USE IN ISOCYANATE CONTAINING ENVIRONMENTS. CONSIDER TYPE OF APPLICATION AND ENVIRONMENTAL CONCENTRATIONS WHEN SELECTING RESPIRATORY PROTECTION. OBSERVE GOVERNMENTAL REGULATIONS FOR RESPIRATOR USE. (29 CFR 910.134(OSHA))(CANADIAN Z94.4)THE USE OF POSITIVE PRESSURE SUPPLIED AIR RESPIRATOR IS MANDATORY WHEN THE AIRBORNE ISOCYANATE CONCENTRATIONS ARE NOT KNOWN. NOTE: ISOCYANATE BASED MATERIALS HAVE BEEN DETERMINED TO CAUSE ALLERGIC SENSITIZATION IN HUMANS. AVOID INHALATION AND DERMAL (SKIN) CONTACT WITH THE UNCURED MATERIAL.

#### VENTILATION:

PROVIDE DILUTION VENTILATION OR LOCAL EXHAUST TO PREVENT BUILD-UP OF VAPORS. USE EXPLOSION-PROOF EQUIPMENT.

PERSONAL PROTECTIVE EQUIPMENT: EYE WASH, SAFETY SHOWER, SAFETY GLASSES OR

GOGGLES, IMPERVIOUS GLOVES, IMPERVIOUS

CLOTHING, FACE SHIELD

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

VAPOR PRESSURE: NOT AVAILABLE SPECIFIC GRAVITY: 1.164

BOILING RANGE (F/C): NOT AVAILABLE WEIGHT PER GALLON: 9.70/ 11.65 IMP APPEARANCE: WHITE WOLATILE BY VOLUME: NOT DETERMINED

PHYSICAL STATE: POWDER SOLUBLE IN WATER: N

PH: NOT APPLICABLE

## **SECTION 10: STABILITY AND REACTIVITY**

UNDER NORMAL CONDITIONS: STABLE (SEE SECTION 5 FIRE FIGHTING MEASURES)

MATERIALS TO AVOID: OXIDIZERS, ACIDS, BASES, AMINES, NITRIC ACID

CONDITIONS TO AVOID: ELEVATED TEMPERATURES, CONTACT WITH

OXIDIZING AGENT, SPARKS, OPEN FLAME, IGNITION

**SOURCES** 

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

# **SECTION 11: TOXICOLOGICAL INFORMATION**

COMMON NAME: METHYLENE BISPHENYL ISOCYANATE

CAS NUMBER: 101-68-8

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

LD50: 2200.00 MG/KG ORL MOU

COMMON NAME: XYLENE CAS NUMBER: 1330-20-7

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

LD50: :> 1700.00 MG/KG SKN RBT LD50: 4300.00 MG/KG ORL RAT LC50: 5000.00 PPM/4HRIHL RAT

COMMON NAME: TITANIUM DIOXIDE

CAS NUMBER: 13463-67-7

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

LD50: 24.00 GM/KG ORL RAT

LC50: 6820.00 MG/M3/4HR IHL RAT

COMMON NAME: HYDROTREATED LIGHT DISTILLATE

CAS NUMBER: 64742-47-8

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

COMMON NAME: POLYURETHANE POLYMER

CAS NUMBER: 68130-40-5

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

COMMON NAME: SULFONIC ACIDS, C10-18-ALKANE, PH ESTERS

CAS NUMBER: 70775-94-9

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

LD50: > 10.00 GM/KG ORL RAT

COMMON NAME: POLYVINYL CHLORIDE

CAS NUMBER: 9002-86-2

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

#### SUPPLEMENTAL HEALTH INFORMATION

CONTAINS A CHEMICAL THAT MAY BE ABSORBED THROUGH SKIN.

NOTICE - REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED 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. OTHER EFFECTS OF OVEREXPOSURE MAY INCLUDE TOXICITY TO LIVER, KIDNEY, CENTRAL NERVOUS SYSTEM.

CARCINOGENICITY: NO CARCINOGENIC EFFECTS ARE ANTICIPATED

REPRODUCTIVE EFFECTS: HIGH EXPOSURES TO XYLENE IN SOME ANIMAL STUDIES.

OFTEN AT MATERNALLY TOXIC LEVELS, HAVE AFFECTED EMBRYO/FETAL DEVELOPMENT. THE SIGNIFICANCE OF

THIS FINDING TO HUMANS IS NOT KNOWN.

MUTAGENICITY: NO MUTAGENIC EFFECTS ARE ANTICIPATED

TERATOGENICITY: NO TERATOGENIC EFFECTS ARE ANTICIPATED

## 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: ADHESIVE, COMBUSTIBLE LIQUID, UN1133, PGIII, ERG 128 IMDG: ADHESIVES, CLASS 3, UN1133, PGIII, LIMITED QUANTITY

IATA: CONSUMER COMMODITY, 9, ID8000

TDG: NOT AVAILABLE

#### **SECTION 15: REGULATORY INFORMATION**

SARA SARA CERCLA HAZ AIR **MARINE** 302 313 302.4 POLLUTANT **POLTNT** CAS NUMBER: 101-68-8 NO YES YES NO NO COMMON NAME: METHYLENE BISPHENYL ISOCYANATE NO YES NO CAS NUMBER: 1330-20-7 YES YES

COMMON NAME: XYLENE

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 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.