MSDS for: LN-601 Revised: 9-Feb-2009

SECTION 1:

PRODUCT IDENTIFIER: LN-601 PROJECT & CONSTRUCTION ADHESIVE

DATE OF PREPARATION: JANUARY 9, 2008

PRODUCT USE: ADHESIVE MANUFACTURED BY: AKZO NOBEL

15885 WEST SPRAGUE ROAD STRONGSVILLE, OHIO 44136, U.S.A.

AKZO NOBEL (CANADA) 8200 KEELE STREET

CONCORD, ONTARIO L4K 2A5, CANADA

EMERGENCY AND MSDS TELEPHONE NUMBER: 1-800-545-2643

MSDS PREPARED BY: PRODUCT SAFETY AND COMPLIANCE DEPARTMENT

AKZO NOBEL NORTH AMERICA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT		WT %
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	CYCLOHEXANE CYCLOHEXANE 110-82-7	1-5
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	LIMESTONE LIMESTONE 1317-65-3	10-20
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	KAOLIN CLAY 1332-58-7	30-40
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	TITANIUM OXIDE TITANIUM DIOXIDE 13463-67-7	0.1-1.0
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	HEPTANE HEPTANE 142-82-5	5-10
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	CRISTOBALITE CRYSTALLINE SILICA, CRISTOBALITE 14464-46-1	0.1-1.0
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	QUARTZ QUARTZ 14808-60-7	1-5
CHEMICAL NAME: COMMON NAME: CAS NUMBER:	BENZENE, 1,3-DIETHENYL-, POLYMER WITH 1,3-BUTADIENE AND ETHENYLBENZENE STYRENE-BUTADIENE POLYMER 26471-45-4	1-5

CHEMICAL NAME: HEPTANE, BRANCHED, CYCLIC AND LINEAR
COMMON NAME: HEPTANE, BRANCHED, CYCLIC AND LINEAR
1-5

CAS NUMBER: 426260-76-6

CHEMICAL NAME: PETROLEUM RESINS 10-20

COMMON NAME: PETROLEUM HYDROCARBON RESIN

CAS NUMBER: 64742-16-1

CHEMICAL NAME: SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC 10-20

COMMON NAME: LIGHT ALIPHATIC SOLVENT NAPHTHA (PETROLEUM)

CAS NUMBER: 64742-89-8

CHEMICAL NAME: DISTILLATES, PETROLEUM, LIGHT DISTILLATE 5-10

HYDROTREAT PROCESS, LOW-BOILING

COMMON NAME: HYDROTREATED LIGHT DISTILLATE

CAS NUMBER: 68410-97-9

CHEMICAL NAME: BENZENE, ETHENYL-, POLYMER WITH 1,3-BUTADIENE 1-5

COMMON NAME: STYRENE-BUTADIENE POLYMER

CAS NUMBER: 9003-55-8

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, FATIGUE, DROWSINESS,

DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE,

UNCOORDINATION, NAUSEA, VOMITING, DIARRHEA, COUGHING,

CENTRAL NERVOUS SYSTEM DEPRESSION, INTOXICATION,

ANESTHETIC EFFECT OR NARCOSIS, DIFFICULTY OF BREATHING, CONVULSIONS. PNEUMOCONIOSIS. LOSS OF CONSCIOUSNESS.

ASPHYXIATION.

SKIN CONTACT: IRRITATION OF SKIN. MAY CAUSE SKIN IRRITATION. PROLONGED

OR REPEATED CONTACT CAN CAUSE DERMATITIS, DEFATTING,

SEVERE SKIN IRRITATION OR BURNS.

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

CAUSE CONJUNCTIVITIS, BLURRED VISION, TEARING OF EYES, REDNESS OF EYES, SEVERE EYE IRRITATION, SEVERE EYE

IRRITATION OR BURNS.

INGESTION: INGESTION MAY CAUSE LUNG INFLAMMATION AND DAMAGE DUE

TO ASPIRATION OF MATERIAL INTO LUNGS, FATIGUE,

DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING, DIARRHEA, GASTRO-

INTESTINAL DISTURBANCES, ABDOMINAL PAIN, CENTRAL NERVOUS SYSTEM DEPRESSION, RESPIRATORY PROBLEMS,

INTOXICATION, DIFFICULTY OF BREATHING,

PULMONARY EDEMA, CONVULSIONS, LOSS OF CONSCIOUSNESS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

EYE, SKIN, RESPIRATORY DISORDERS, LUNG DISORDERS, CARDIAC ABNORMALITIES, RESPIRATORY DISORDERS, SKIN 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.

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): 4 F./ -16 C. LOWER EXPLOSIVE LIMIT: 1.2 (%)

UPPER EXPLOSIVE LIMIT: 6.7 (%)

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 MAY IGNITE EXPLOSIVELY AT AMBIENT TEMPERATURES. 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, ACROLEIN, METHANE, ALDEHYDES, TOXIC GASES, OXIDES OF CALCIUM, KETONES

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 WITH EXPLOSION-PROOF EQUIPMENT. SPILLS MAY BE COLLECTED WITH ABSORBENT MATERIALS. USE NON-SPARKING TOOLS. EVACUATE ALL UNNECESSARY PERSONNEL. PLACE COLLECTED MATERIAL IN PROPER CONTAINER. WET DOWN SPILLED MATERIAL WITH WATER. COMPLETE PERSONAL PROTECTIVE EQUIPMENT MUST BE USED DURING CLEANUP.

LARGE SPILLS: SHUT OFF LEAK IF SAFE TO DO SO. DIKE ANDCONTAIN 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

STORE BELOW 80F. 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. 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: CYCLOHEXANE

CAS NUMBER: 110-82-7

ACGIH(TWA): 100 PPM OSHA(TWA): 300 PPM

COMMON NAME: LIMESTONE CAS NUMBER: 1317-65-3

ACGIH(TWA): 10 MG/M3 OSHA(TWA): 5 MG/M3

COMMON NAME: CLAY CAS NUMBER: 1332-58-7

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

COMMON NAME: TITANIUM DIOXIDE

CAS NUMBER: 13463-67-7

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

COMMON NAME: HEPTANE CAS NUMBER: 142-82-5

ACGIH(TWA): 400 PPM OSHA(TWA): 500 PPM

ACGIH(STEL): 500 PPM

COMMON NAME: CRYSTALLINE SILICA, CRISTOBALITE

CAS NUMBER: 14464-46-1

ACGIH(TWA): 0.025 MG/M3 OSHA(TWA): 0.05 MG/M3

COMMON NAME: QUARTZ CAS NUMBER: 14808-60-7

ACGIH(TWA): 0.025 MG/M3 OSHA(TWA): 0.1 MG/M3

COMMON NAME: PETROLEUM HYDROCARBON RESIN

CAS NUMBER: 64742-16-1

ACGIH(TWA): 10 MG/M3 OSHA(TWA): 15 MG/M3

COMMON NAME: LIGHT ALIPHATIC SOLVENT NAPHTHA (PETROLEUM)

CAS NUMBER: 64742-89-8 OSHA(TWA): 300 PPM

COMMON NAME: HYDROTREATED LIGHT DISTILLATE

CAS NUMBER: 68410-97-9 OSHA(TWA): 500 PPM

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. USE EXPLOSION-PROOF EQUIPMENT. USE NON-SPARKING 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: 1.171

BOILING RANGE (F/C): 182-220/ 83-104 WEIGHT PER GALLON: 9.75 / 11.71 IMP

% VOLATILE BY VOLUME: 56.99 APPEARANCE: TAN PHYSICAL STATE: PASTE PH: N/A

SOLUBILITY IN WATER: NO

SECTION 10: STABILITY AND REACTIVITY

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

MATERIALS TO AVOID: OXIDIZERS, ACIDS, HALOGENS, AMMONIUM SALTS,

PEROXIDES, STYRENE MONOMER

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: CYCLOHEXANE

CAS NUMBER: 110-82-7

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

LD50: > 180.00 GM/KG SKN RBT LD50: 12.70 GM/KG ORL RAT LC50: 70.00 PPM IHL MAM

COMMON NAME: LIMESTONE

CAS NUMBER: 1317-65-3

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

LD50: 6450.00 MG/KG ORL RAT

COMMON NAME: CLAY CAS NUMBER: 1332-58-7

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

COMMON NAME: TITANIUM DIOXIDE

CAS NUMBER: 13463-67-7

CARCINOGENICITY LISTED BY: NTP YES 2B IARC YES 2B OSHA NO ACGIH NO

LD50: 24.00 GM/KG ORL RAT

LC50: 6820.00 MG/M3/4HR IHL RAT

COMMON NAME: HEPTANE CAS NUMBER: 142-82-5

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

LD50: 222.00 MG/KG IVN MOU

COMMON NAME: CRYSTALLINE SILICA, CRISTOBALITE

CAS NUMBER: 14464-46-1

COMMON NAME: QUARTZ CAS NUMBER: 14808-60-7

CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA NO ACGIH YES A2

COMMON NAME: HEPTANE, BRANCHED, CYCLIC AND LINEAR

CAS NUMBER: 426260-76-6

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

PETROLEUM HYDROCARBON RESIN COMMON NAME:

CAS NUMBER: 64742-16-1

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

LD50: 7.00 GM/KG ORL MAM

COMMON NAME: LIGHT ALIPHATIC SOLVENT NAPHTHA (PETROLEUM)

CAS NUMBER: 64742-89-8

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

LD50: > 3.16 GM/KG SKN RBT LD50: > 5.00 GM/KG ORL RAT

HYDROTREATED LIGHT DISTILLATE COMMON NAME:

68410-97-9 CAS NUMBER:

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

COMMON NAME: STYRENE-BUTADIENE POLYMER

CAS NUMBER: 9003-55-8

CARCINOGENICITY LISTED BY: NTP NO IARC YES 3 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 CENTRAL NERVOUS SYSTEM.

CARCINOGENICITY: CONTAINS CRYSTALLINE SILICA WHICH IS CONSIDERED A HAZARD

BY INHALATION. IARC HAS CLASSIFIED CRYSTALLINE SILICA AS CARCINOGENIC TO HUMANS (GROUP 1). CRYSTALLINE SILICA IS ALSO A KNOWN CAUSE OF SILICOSIS, A NONCANCEROUS LUNG DISEASE. THE NATIONAL TOXICOLOGY PROGRAM (NTP) HAS CLASSIFIED CRYSTALLINE SILICA AS A KNOWN HUMAN

CARCINOGEN. IN A LIFETIME INHALATION STUDY, EXPOSURE TO 250 MG/M3 TITANIUM DIOXIDE RESULTED IN THE DEVELOPMENT OF LUNG TUMORS IN RATS. THESE TUMORS OCCURRED ONLY AT DUST LEVELS THAT OVERWHELMED THE ANIMALS' LUNG

CLEARANCE MECHANISMS AND WERE DIFFERENT FROM COMMON

HUMAN LUNG TUMORS IN BOTH TYPE AND LOCATION. THE RELEVANCE OF THESE FINDINGS TO HUMANS IS UNKNOWN BUT QUESTIONABLE. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CLASSIFIED TITANIUM DIOXIDE AS POSSIBLY CARCINOGENIC TO HUMANS (GROUP 2B) BASED ON INADEQUATE EVIDENCE OF CARCINOGENICITY IN HUMANS AND SUFFICIENT EVIDENCE OF CARCINOGENICITY IN EXPERIMENTAL

ANIMALS.

REPRODUCTIVE EFFECTS: NO REPRODUCTIVE EFFECTS ARE ANTICIPATED

MUTAGENICITY: NO MUTAGENIC EFFECTS ARE ANTICIPATED

TERATOGENICITY: NO TERATOGENIC EFFECTS ARE ANTICIPATED

SECTION 12: ECOLOGICAL INFORMATION

NO ECOLOGICAL TESTING HAS BEEN DONE BY AKZO NOBEL ON THIS PRODUCT AS WHOLE.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

AVOID DISCHARGE TO NATURAL WATERS.

SECTION 14: TRANSPORT INFORMATION

DOT: UN1133, ADHESIVES, 3, PGIII,ERG 128

IMDG: UN1133, ADHESIVES, CLASS 3, PG III,LTD OTY, (IMDG 3.4.7,2.3.2.3) ERG128,

UN1133, ADHESIVES, CLASS 3, PG III

IATA: ID8000, CONSUMER COMMODITY, 9

TDG: NOT AVAILABLE

SECTION 15: REGULATORY INFORMATION

SARA SARA CERCLA HAZ AIR MARINE 302 313 302.4 POLLUTANT POLTNT

CAS NUMBER: 110-82-7 NO YES YES NO NO

COMMON NAME: CYCLOHEXANE

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 AKZO NOBEL BELIEVES TO BE RELIABLE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA. AKZO NOBEL 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.