

Liquid Nails Heavy Duty Construction Adhesive

MSDS for: LN-903

Revised: 12-Feb-2009

SECTION 1:

PRODUCT IDENTIFIER: LN-903 LIQUID NAILS MULTIPURPOSE CONSTRUCTION ADHESIVE

DATE OF PREPARATION: FEBRUARY 5, 2008

PRODUCT USE: ADHESIVE

MANUFACTURED BY: AKZO NOBEL
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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: STYRENE BUTADIENE COPOLYMER	10-20
COMMON NAME: STYRENE BUTADIENE COPOLYMER	
CAS NUMBER: CONFIDENTIAL	
CHEMICAL NAME: LIMESTONE	10-20
COMMON NAME: LIMESTONE	
CAS NUMBER: 1317-65-3	
CHEMICAL NAME: KAOLIN	20-30
COMMON NAME: CLAY	
CAS NUMBER: 1332-58-7	
CHEMICAL NAME: TITANIUM OXIDE	0.1-1.0
COMMON NAME: TITANIUM DIOXIDE	
CAS NUMBER: 13463-67-7	
CHEMICAL NAME: CRISTOBALITE	0.1-1.0
COMMON NAME: CRYSTALLINE SILICA, CRISTOBALITE	
CAS NUMBER: 14464-46-1	
CHEMICAL NAME: QUARTZ	1-5
COMMON NAME: QUARTZ	
CAS NUMBER: 14808-60-7	
CHEMICAL NAME: HEAVY NAPHTHENIC DISTILLATE, SEVERELY HYDROTREATED*	1-5
COMMON NAME: PETROLEUM HYDROCARBON	
CAS NUMBER: 64742-52-5*	

CHEMICAL NAME:	SOLVENT NAPHTHA (PETROLEUM), MEDIUM ALIPHATIC	1-5
COMMON NAME:	MEDIUM ALIPHATIC SOLVENT NAPHTHA	
CAS NUMBER:	64742-88-7	
 CHEMICAL NAME:	 ALKENES, ETHYLENE-MANUF.-BY-PRODUCT	 5-10
	PIPERYLENE-CUT, POLYMERS WITH STEAM-CRACKED	
	PETROLEUM DISTILLATES	
COMMON NAME:	RESIN	
CAS NUMBER:	68131-89-5	
 CHEMICAL NAME:	 WATER	 20-30
COMMON NAME:	WATER	
CAS NUMBER:	7732-18-5	

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, DROWSINESS, DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, NAUSEA, SORE THROAT, CENTRAL NERVOUS SYSTEM DEPRESSION, INTOXICATION, DIFFICULTY OF BREATHING, SEVERE LUNG IRRITATION OR DAMAGE, CONVULSIONS, PNEUMOCONIOSIS, LOSS OF CONSCIOUSNESS, ASPHYXIATION.
SKIN CONTACT:	IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE DERMATITIS, DEFATTING. SKIN CONTACT MAY RESULT IN DERMAL ABSORPTION OF COMPONENT(S) OF THIS PRODUCT WHICH MAY CAUSE CENTRAL NERVOUS SYSTEM DEPRESSION.
EYE CONTACT:	IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN CAUSE CONJUNCTIVITIS, TEARING OF EYES, REDNESS OF EYES.
INGESTION:	INGESTION MAY CAUSE LUNG INFLAMMATION AND DAMAGE DUE TO ASPIRATION OF MATERIAL INTO LUNGS, MUCOUS MEMBRANE IRRITATION, NAUSEA, VOMITING, DIARRHEA, GASTRO-INTESTINAL DISTURBANCES, ABDOMINAL PAIN, COUGHING, CENTRAL NERVOUS SYSTEM DEPRESSION, DIFFICULTY OF BREATHING, PULMONARY EDEMA, CYANOSIS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

EYE, SKIN, RESPIRATORY DISORDERS, LUNG DISORDERS,
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.

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): ABOVE 200F/93C **LOWER EXPLOSIVE LIMIT:** NOT AVAILABLE
UPPER EXPLOSIVE LIMIT: 7.0 %

FIRE EXTINGUISHING MEDIA: DRY CHEMICAL OR FOAM, WATER FOG, CARBON DIOXIDE

UNUSUAL FIRE AND EXPLOSION HAZARDS

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL LONG DISTANCES TO A SOURCE OF IGNITION AND FLASH BACK. 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 SULFUR, ALDEHYDES,
TOXIC GASES, STYRENE, OXIDES OF CALCIUM, SMOKE

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

COMPLY WITH ALL APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS. VENTILATE AREA. 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 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. STORE BELOW 100F (38C). KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. KEEP FROM FREEZING. STORE ABOVE 20F (-7C).

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:	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:	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	
CAS NUMBER:	64742-52-5*	
ACGIH(TWA):	5 MG/M3	OSHA(TWA): 5 MG/M3
ACGIH(STEL):	10 MG/M3	

COMMON NAME: MEDIUM ALIPHATIC SOLVENT NAPHTHA
CAS NUMBER: 64742-88-7
OSHA(TWA): 500 * PPM
* AS PETROLEUM DISTILLATES

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.

PERSONAL PROTECTIVE EQUIPMENT

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE:	NOT AVAILABLE	SPECIFIC GRAVITY:	1.384
BOILING RANGE (F/C):	212-306/100-152	WEIGHT PER GALLON:	11.53/13.85 IMP
APPEARANCE:	WHITE	%VOLATILE BY VOLUME:	38.99
PHYSICAL STATE:	PASTE	PH:	8.00
SOLUBLE IN WATER:	YES		

SECTION 10: STABILITY AND REACTIVITY

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

MATERIALS TO AVOID: OXIDIZERS, ACIDS, BASES, AMMONIUM SALTS,
PEROXIDES, METAL SALTS, METAL COMPOUNDS,
STYRENE MONOMER

CONDITIONS TO AVOID: ELEVATED TEMPERATURES, CONTACT WITH
OXIDIZING AGENT, FREEZING, SPARKS, OPEN
FLAME, IGNITION SOURCES

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

COMMON NAME: STYRENE BUTADIENE COPOLYMER
CAS NUMBER: CONFIDENTIAL
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

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: CRYSTALLINE SILICA, CRISTOBALITE
CAS NUMBER: 14464-46-1
CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA NO ACGIH YES A2

COMMON NAME: QUARTZ
CAS NUMBER: 14808-60-7
CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA NO ACGIH YES A2

COMMON NAME: PETROLEUM HYDROCARBON
CAS NUMBER: 64742-52-5*
CARCINOGENICITY LISTED BY: NTP NO IARC YES 3 OSHA NO ACGIH NO

COMMON NAME: MEDIUM ALIPHATIC SOLVENT NAPHTHA
CAS NUMBER: 64742-88-7
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: 28.00 GM/KG SKN RBT
LD50: 28.00 GM/KG ORL RAT

COMMON NAME: RESIN
CAS NUMBER: 68131-89-5
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

SUPPLEMENTAL HEALTH INFORMATION

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.

CARCINOGENICITY: STODDARD SOLVENT IIC HAS BEEN SHOWN TO CAUSE KIDNEY TUMORS IN MALE RATS IN A NATIONAL TOXICOLOGY PROGRAM (NTP) STUDY. THESE TUMORS WERE ASSOCIATED WITH A SPECIFIC PROTEIN, ALPHA-2U-MICROGLOBULIN. BECAUSE HUMANS DO NOT PRODUCE THIS PROTEIN STODDARD SOLVENT IIC HAS NOT BEEN CLASSIFIED AS A HUMAN CARCINOGEN. 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 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

IMDG: NOT AVAILABLE

IATA: NOT AVAILABLE

TDG: NOT AVAILABLE

SECTION 15: REGULATORY INFORMATION

SARA	SARA	CERCLA	HAZ AIR	MARINE
302	313	302.4	POLLUTANT	POLNTNT

THIS PRODUCT CONTAINS NO SARA 302, CERCLA 302.4 OR HAZARDOUS AIR POLLUTANT CHEMICALS. IT ALSO CONTAINS NO CHEMICALS WHICH ARE SUBJECT TO THE REPORTING REQUIREMENTS UNDER SARA 313. 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.