

**MSDS for: LN-903****Revised: 21-Jun-2010****SECTION 1:**

PRODUCT IDENTIFIER: LN-903 LIQUID NAILS MULTIPURPOSE CONSTRUCTION  
ADHESIVE  
DATE OF PREPARATION: JUNE 21, 2010  
PRODUCT USE: ADHESIVE

MANUFACTURED BY: AKZO NOBEL  
15885 WEST SPRAGUE ROAD  
STRONGSVILLE, OHIO 44136, U.S.A.

AKZO NOBEL (CANADA)  
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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**

<b>INGREDIENT</b>	<b>WT. %</b>
CHEMICAL NAME: ACRYLIC RESIN COMMON NAME: ACRYLIC RESIN CAS NUMBER: CONFIDENTIAL	10-20
CHEMICAL NAME: POLYVINYL ACETATE COPOLYMER COMMON NAME: POLYVINYL ACETATE EMULSION CAS NUMBER: CONFIDENTIAL	1-5
CHEMICAL NAME: 1,2-ETHANEDIOL COMMON NAME: ETHYLENE GLYCOL CAS NUMBER: 107-21-1	0.1-1.0
CHEMICAL NAME: LIMESTONE COMMON NAME: LIMESTONE CAS NUMBER: 1317-65-3	20-30
CHEMICAL NAME: KAOLIN COMMON NAME: CLAY CAS NUMBER: 1332-58-7	20-30
CHEMICAL NAME: TITANIUM OXIDE COMMON NAME: TITANIUM DIOXIDE CAS NUMBER: 13463-67-7	0.1-1.0
CHEMICAL NAME: CRISTOBALITE COMMON NAME: CRYSTALLINE SILICA, CRISTOBALITE CAS NUMBER: 14464-46-1	0.1-1.0

CHEMICAL NAME:	QUARTZ	1-5
COMMON NAME:	QUARTZ	
CAS NUMBER:	14808-60-7	
CHEMICAL NAME:	PROPANOL, OXYBIS-, DIBENZOATE	1-5
COMMON NAME:	DIPROPYLENE GLYCOL DIBENZOATE	
CAS NUMBER:	27138-31-4	
CHEMICAL NAME:	FORMALDEHYDE	< 0.01
COMMON NAME:	FORMALDEHYDE	
CAS NUMBER:	50-00-0	
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 HEADACHE, NAUSEA, DIFFICULTY OF BREATHING, PNEUMOCONIOSIS.
- SKIN CONTACT: IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE DEFATTING.
- EYE CONTACT: IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN CAUSE TEARING OF EYES, REDNESS OF EYES.
- INGESTION: INGESTION MAY CAUSE MOUTH AND THROAT IRRITATION, NAUSEA, GASTRO-INTESTINAL DISTURBANCES, ABDOMINAL PAIN.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

EYE, SKIN, RESPIRATORY DISORDERS, LUNG 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: NOT AVAILABLE

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

UNUSUAL FIRE AND EXPLOSION HAZARDS

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, ACRYLIC MONOMERS,  
OXIDES OF CALCIUM

#### **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. PLACE COLLECTED MATERIAL IN PROPER CONTAINER. SPILLED MATERIAL IS EXTREMELY SLIPPERY.

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 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.

#### **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: FORMALDEHYDE  
CAS NUMBER: 50-00-0  
OSHA(TWA): 0.75 PPM  
ACGIH(STEL): C 0.3 PPM OSHA(STEL): 2 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.

#### **PERSONAL PROTECTIVE EQUIPMENT**

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

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

VAPOR PRESSURE: NOT AVAILABLE      SPECIFIC GRAVITY: 1.497  
BOILING RANGE (F/C): 212-212/100-100      WEIGHT PER GALLON: 12.47/14.98 IMP  
APPEARANCE: WHITE      %VOLATILE BY VOLUME: 42.97  
PHYSICAL STATE: PASTE      SOLUBLE IN WATER: YES  
PH: 9.70

**SECTION 10: STABILITY AND REACTIVITY**

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

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

CONDITIONS TO AVOID: FREEZING

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

**SECTION 11: TOXICOLOGICAL INFORMATION**

COMMON NAME: POLYVINYL ACETATE EMULSION  
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: DIPROPYLENE GLYCOL DIBENZOATE  
CAS NUMBER: 27138-31-4  
CARCINOGENICITY LISTED BY: NTP NO      IARC NO      OSHA NO      ACGIH NO  
LD50: > 2000.00 MG/KG SKN RBT  
LD50: 4673.00 MG/KG ORL RAT  
LC50: > 200.00 GM/M3/4HR IHL RAT

COMMON NAME: FORMALDEHYDE  
CAS NUMBER: 50-00-0  
CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA YES ACGIH YES A2  
LD50: 100.00 MG/KG ORL RAT  
LC50: 203.00 MG/M3 IHL PIG

#### SUPPLEMENTAL HEALTH INFORMATION

THE MANUFACTURER OF DIPROPYLENE GLYCOL DIBENZOATE CONDUCTED TOXICITY TESTS AND FOUND DECREASED BODY WEIGHT GAIN, AND BLOOD, LIVER AND CAECUM EFFECTS IN RATS GIVEN UP TO 2500 MG/KG/DAY IN THE DIET FOR 13 WEEKS. ALL TREATMENT RELATED CHANGES SHOWED EVIDENCE OF, OR COMPLETE, RECOVERY AFTER 4 WEEKS WITHOUT TREATMENT. RELEVANCE TO HUMANS IS UNKNOWN.

CARCINOGENICITY: CONTAINS FORMALDEHYDE, A POTENTIAL CANCER HAZARD. RATS EXPOSED TO FORMALDEHYDE VIA INHALATION DEVELOPED CANCER OF THE NASAL CAVITY. EVIDENCE IN HUMANS IS LIMITED (NASAL AND NASOPHARYNGEAL CANCER). FORMALDEHYDE IS LISTED AS A CARCINOGEN BY OSHA, PROBABLE HUMAN CARCINOGEN (GROUP 2A) BY IARC, AND A KNOWN HUMAN CARCINOGEN BY NTP. OVEREXPOSURE CAN CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION, AND SKIN AND RESPIRATORY SENSITIZATION. 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 PAINTS LLC ON THIS PRODUCT AS A WHOLE.

**SECTION 13: DISPOSAL CONSIDERATIONS**

WASTE DISPOSAL: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.

**SECTION 14: TRANSPORT INFORMATION**

DOT: ADHESIVE  
IMDG: NOT AVAILABLE  
IATA: NOT AVAILABLE  
TDG: NOT AVAILABLE

**SECTION 15: REGULATORY INFORMATION**

	SARA 302	SARA 313	CERCLA 302.4	HAZ AIR POLLUTANT	MARINE POLTNT
CAS NUMBER: 50-00-0	YES	YES	YES	YES	NO
COMMON NAME: FORMALDEHYDE					

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