

MSDS for: LN-730

Revised: 12-Feb-2009

SECTION 1:

PRODUCT IDENTIFIER: LN-730 LIQUID NAILS ADHESIVE FOR MIRRORS
DATE OF PREPARATION: DECEMBER 1, 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: TITANIUM OXIDE COMMON NAME: TITANIUM DIOXIDE CAS NUMBER: 13463-67-7	0.1-1.0
CHEMICAL NAME: 2-BUTANONE, O,O',O''-(METHYLDILYLIDYNE)TRIOXIME COMMON NAME: METHYLTRI(2-BUTANONEOXIMYL)SILANE CAS NUMBER: 22984-54-9	1-5
CHEMICAL NAME: SILOXANES AND SILICONES, DI-ME HYDROXY TERMINATED COMMON NAME: DIMETHYL(POLYSILOXANE) CAS NUMBER: 70131-67-8	80-90
CHEMICAL NAME: SILICA COMMON NAME: AMORPHOUS SILICA CAS NUMBER: 7631-86-9	5-10
CHEMICAL NAME: 2-BUTANONE, O,O'-(METHOXYMETHYLSILYLENE)DIOXIME COMMON NAME: DI (ETHYLMETHYLKETOXIME) METHOXYMETHYL SILANE CAS NUMBER: 83817-72-5	1-5

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 DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, BLOOD ABNORMALITIES, RESPIRATORY FAILURE.
- SKIN CONTACT:** IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE ALLERGIC RESPONSE. POSSIBLE SENSITIZATION TO SKIN.
- SKIN CONTACT:** MAY RESULT IN DERMAL ABSORPTION OF COMPONENT(S) OF THIS PRODUCT WHICH MAY CAUSE BLOOD ABNORMALITIES, RESPIRATORY FAILURE.
- EYE CONTACT:** IRRITATION OF EYES.
- INGESTION:** INGESTION MAY CAUSE GASTRO-INTESTINAL DISTURBANCES, ABDOMINAL PAIN, INTOXICATION, BLOOD ABNORMALITIES, RESPIRATORY FAILURE.

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.
- 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

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.

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, FORMALDEHYDE, OXIDES OF SILICON, METHYL ETHYL KETONE (MEK), METHYLETHYL KETOXIME, SILICON COMPOUNDS

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. SPILLS MAY BE COLLECTED WITH ABSORBENT MATERIALS. PLACE COLLECTED MATERIAL IN PROPER CONTAINER.

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.

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. GROUND EQUIPMENT WHEN TRANSFERRING TO PREVENT ACCUMULATION OF STATIC CHARGE.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

COMMON NAME:	TITANIUM DIOXIDE	
CAS NUMBER:	13463-67-7	
ACGIH(TWA):	10 MG/M3	OSHA(TWA): 10 MG/M3

COMMON NAME: AMORPHOUS SILICA
CAS NUMBER: 7631-86-9
ACGIH(TWA): 10 MG/M3 OSHA(TWA): 6MG/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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE:	NOT AVAILABLE	SPECIFIC GRAVITY:	1.032
BOILING RANGE (F/C):	NOT AVAILABLE	WEIGHT PER GALLON:	8.60 / 10.33 IMP
APPEARANCE:	WHITE	%VOLATILE BY VOLUME:	NOT DETERMINED
PHYSICAL STATE:	PASTE	SOLUBLE IN WATER:	NO
PH:	N/A		

SECTION 10: STABILITY AND REACTIVITY

UNDER NORMAL CONDITIONS: STABLE, STABLE BELOW 212 F (100 C). (SEE SECTION 5 FIRE FIGHTING MEASURES)

MATERIALS TO AVOID: OXIDIZERS, ACIDS, WATER, IRON

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

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

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: METHYLTRI(2-BUTANONEOXIMYL)SILANE
CAS NUMBER: 22984-54-9
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME: DIMETHYL(POLYSILOXANE)
CAS NUMBER: 70131-67-8
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: > 40.00 GM/KG ORL RAT
LD50: > 16.00 ML/KG SKN RBT
LC50: > 535.00 MG/LIHL RAT

COMMON NAME: AMORPHOUS SILICA
CAS NUMBER: 7631-86-9
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME: DI (ETHYLMETHYLKETOXIME) METHOXYMETHYL SILANE
CAS NUMBER: 83817-72-5
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

SUPPLEMENTAL HEALTH INFORMATION

METHYL ETHYL KETOXIME (MEKO) MAY BE FORMED UPON CONTACT, WITH WATER OR HUMID AIR. EXPERIMENTAL ANIMALS EXPOSED TO MEKO VAPOR THROUGHOUT THEIR LIFETIME DEVELOPED LIVER CANCER. THE RELEVANCE TO HUMANS IS UNKNOWN. MAINTAIN EXPOSURE LEVELS AS LOW AS POSSIBLE. MEKO SUPPLIER RECOMMENDED EXPOSURE GUIDELINES: TWA = 3 PPM, STEL = 10 PPM.

CARCINOGENICITY: THIS PRODUCT CONTAINS METHYLPOLYSILOXANES WHICH CAN GENERATE FORMALDEHYDE AT APPROXIMATELY 300 DEGREES F (150C), AND ABOVE, IN THE PRESENCE OF OXYGEN. FORMALDEHYDE IS A SKIN AND RESPIRATORY SENSITIZER, EYE AND THROAT IRRITANT, ACUTE TOXICANT, AND POTENTIAL CANCER HAZARD. 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.

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	POLTNT

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.