

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards

MSDS Revision: 1.0

MSDS Revision Date: 08/01/2008

1. PRODUCT IDENTIFICATION

CHEMICAL RESPONSE CARD: 92

1.1	Product Name:	ELRING AFD2018 SEALANT	RESPONSE TEAM PPE:				
1.2	Chemical Name:	NA					
1.3	Synonyms:	None reported by the manufacturer	WHMIS:				
1.4	Trade Names:	AFD 2018					
1.5	Product Use:	Sealing Compound	HEALTH:				1
1.6	Manufacturer's Name:	ErlingKlinger AG	FLAMMABILITY:				1
1.7	Manufacturer's Address:	Max-Eyth-StraBe 2 D-72581 Dettingen/Erms	REACTIVITY:				0
1.8	Business Phone:	+49 (071) 237-4253	PERSONAL PROTECTION:				B
1.9	Emergency Phone:	CHEMTREC +1 (800) 424-9300/+1 (703) 527-3887					

2. HAZARD IDENTIFICATION

2.1	Hazard Identification: This product is not classified as a HAZARDOUS SUBSTANCE but not as DANGEROUS GOODS according to the classification criteria of NOHSC:1088 (1999) and ADG Code (Australia).						
2.2	Routes of Entry:	Inhalation:	YES	Absorption:	YES	Ingestion:	NO
2.3	Effects of Exposure: EYES: Mild irritation. SKIN: May cause irritation to sensitive skin. INGESTION: May cause irritation, nausea, vomiting, diarrhea. INHALATION: Respiratory irritation.						
2.4	Symptoms of Exposure: EYES: Mild irritation. SKIN: May cause irritation to sensitive skin. INGESTION: May cause irritation, nausea, vomiting, diarrhea. INHALATION: Respiratory irritation.						
2.5	Acute Health Effects: EYES: Mild irritation. SKIN: May cause irritation to sensitive skin. INGESTION: May cause irritation, nausea, vomiting, diarrhea. INHALATION: Respiratory irritation.						
2.6	Chronic Health Effects: The manufacturer has not reported any chronic health effects.						
2.7	Target Organs: None reported by the manufacturer.						

3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m ³)								
					ACGIH		NOHSC			OSHA			OTHER
					TLV	STEL	ppm	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	
METHACRYLIC ACID MONOESTER W/PROPANE 1,2-DIOL	27813-02-1	UD3442500	248-666-3	≤ 20.0	NA	NA	NF	NF	NF	NA	NA	NA	
2-HYDROXYETHYL METHACRYLATE	868-77-9	NA	212-782-2	≤ 20.0	NA	NA	NF	NF	NF	NA	NA	NA	
METHACRYLATE ESTER	NA	NA	NA	≥ 10.0	NA	NA	NF	NF	NF	NA	NA	NA	
ACRYLIC ACID	79-10-7	AS4375000	201-177-9	≤ 5.0	(2)	NA	(2)	NF	NF	(2)	NA	NA	
A,A-DIMETHYLBENZYL HYDROPEROXIDE	80-15-9	MX2450000	201-254-7	≤ 2.0	NA	NA	NF	NF	NF	NA	NA	NA	

NA = Not Available; ND = Not Determined; NE = Not Established; NF = Not Found; C = Ceiling Limit; See Section 16 for Additional Definitions of Terms Used. NOTE: all WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-2004 format.

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4. FIRST AID MEASURES

4.1 First Aid:

EYES: Flush eyes thoroughly with copious amounts of water for at least 20 minutes, holding eyelids open to ensure complete flushing. Seek immediate medical attention.

SKIN: Remove contaminated clothing and flush affected areas with water. Seek prompt medical attention. Launder clothing before reuse.

INGESTION: Do not induce vomiting. Have conscious person rise out mouth with water, then drink 1 or 2 glasses of water. Never give an unconscious person anything to ingest. If vomiting spontaneously occurs, have victim lean forward with head down to avoid breathing in the vomitus (vapors from vomit) into the lungs. Rinse out mouth and administer more water. Call a physician or poison control center for assistance and instructions. Seek immediate medical attention. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.

INHALATION: Remove victim to fresh air at once. If breathing is difficult, provide supplemental oxygen. If breathing has stopped, provide artificial respiration. Seek immediate medical attention. Provide supportive treatment, keeping victim warm and quiet.

4.2 Medical Conditions Aggravated by Exposure: NA	HEALTH		1
	FLAMMABILITY		1
	REACTIVITY		0
	PROTECTIVE EQUIPMENT		B
	EYES	SKIN	

5. FIREFIGHTING MEASURES

5.1 Flashpoint & Method:	>100°C, (212°F)		
5.2 Autoignition Temperature:	NA		
5.3 Flammability Limits:	Lower Explosive Limit (LEL):	NA	Upper Explosive Limit (UEL): NA
5.4 Fire & Explosion Hazards:	There is no special measures required. This product is combustible.		
5.5 Extinguishing Methods:	Carbon Dioxide, foam, or, water jet. Fight larger fires with water jet or alcohol-resistant foam.		
5.6 Firefighting Procedures:	Keep containers cool until well after the fire is out. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters should wear full-face, self-contained breathing apparatus (MSHA/NIOSH approved or the equivalent) and impervious clothing. Avoid inhalation of hazardous decomposition products, may cause serious damage to health.		



6. ACCIDENTAL RELEASE MEASURES

6.1 Spills:

Secure spill area, remove or minimize all sources of ignition, and maximize ventilation. Stop spill or leak at source if safely possible. Deny entry to all unprotected individuals. Individuals involved in the cleanup must wear appropriate personal protective equipment. Recover free liquid or cover with inert absorbent material (sand, diatomite, acid binders, sawdust, etc.), and place into appropriate container(s) for disposal. If necessary, dike well ahead of the spill to prevent runoff into drains, sewers or any natural waterway or drinking supply. Contact appropriate local and/or provincial authorities for assistance and/or reporting requirements. Avoid contact with eyes and skin.

7. HANDLING & STORAGE INFORMATION

7.1 Work & Hygiene Practices:
Keep hands away from eyes when handling material or before washing after use. Wash thoroughly after using – particularly before eating and smoking. If this product is sanded or machined after curing, take appropriate precautions against inhalation of nuisance particulates.

7.2 Storage & Handling:
Handle cautiously; avoid contact with skin and eyes. Use in well ventilated areas. Storage and handling areas should be equipped with proper containment to capture and neutralize spills. Store only in original container. Store at temperatures between + 5 °C and +28 °C. Keep away from heat and direct sunlight. Remove contaminated clothing immediately and launder before reuse.

7.3 Special Precautions:
Storage and use areas should be equipped with eyewash stations and safety showers.

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8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Ventilation & Engineering Controls:	General mechanical is satisfactory. If odor is disagreeable, use local exhaust.
8.2	Respiratory Protection:	None required under normal conditions. A respiratory protection program that meets ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirators use.
8.3	Eye Protection:	Safety glasses with side shields should be used with this product. If splashing is anticipated, splash goggles and a face shield are recommended.
8.4	Hand Protection:	Wear chemical impervious and resistant gloves to prevent skin contact.
8.5	Body Protection:	Wear protective clothing to prevent skin contact. Aprons, gloves, and boots should be constructed of: impermeable material. For frequent contact or total immersion, contact a manufacturer of protective clothing for appropriate chemical impervious equipment.

9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Density:	1.0-1.1 g/cm ³ @ 20 °C
9.2	Boiling Point:	ND
9.3	Melting Point:	ND
9.4	Evaporation Rate:	NA
9.5	Vapor Pressure:	< 3.0 kPa
9.6	Molecular Weight:	NA
9.7	Appearance & Color:	Red Fluid
9.8	Odor Threshold:	Characteristic
9.9	Solubility:	Insoluble
9.10	Ph	3-5
9.11	Viscosity:	50-250 HT Pas (Brookfield) @ 25 °C
9.12	Other Information:	Self-inflammability: >380 °C

10. STABILITY & REACTIVITY

10.1	Stability:	Stable at ambient temperatures.
10.2	Hazardous Decomposition Products:	Carbon monoxide and carbon dioxide.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Exposure to open flame or excessive heat, (above 60 °C, (140 °F).
10.5	Incompatible Substances:	Strong oxidizing and reducing agents.

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11. TOXICOLOGICAL INFORMATION

11.1	Toxicity Data: Oral LD₅₀; >2000 mg/kg (rat), dermal LD₅₀; >2000 mg/kg (rabbit). Acrylic Acid, LD₅₀; 250 mg/kg (rat), dermal LD₅₀; 280 mg/kg (rabbit). a,a-dimethylbenzyl hydroperoxide; LD₅₀; 382 mg/kg (rat), dermal LD₅₀; 500 mg/kg (rat), inhalation LC₅₀/4h 220 mg/L (rat). Primary irritant effects: skin; irritant to skin and mucous membranes, and eyes. Sensitization possible by skin contact.								
11.2	Acute Toxicity: See section 2.5								
11.3	Chronic Toxicity: See section 2.6								
11.4	Suspected Carcinogen: No								
11.5	Reproductive Toxicity: <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td>Mutagenicity:</td> <td>This product is not expected to cause mutagenic effects in humans.</td> </tr> <tr> <td>Embryotoxicity:</td> <td>This product is not expected to cause embryotoxic effects in humans.</td> </tr> <tr> <td>Teratogenicity:</td> <td>This product is not expected to cause teratogenic effects in humans.</td> </tr> <tr> <td>Reproductive Toxicity:</td> <td>This product is not expected to cause reproductive harm in humans.</td> </tr> </table>	Mutagenicity:	This product is not expected to cause mutagenic effects in humans.	Embryotoxicity:	This product is not expected to cause embryotoxic effects in humans.	Teratogenicity:	This product is not expected to cause teratogenic effects in humans.	Reproductive Toxicity:	This product is not expected to cause reproductive harm in humans.
Mutagenicity:	This product is not expected to cause mutagenic effects in humans.								
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Teratogenicity:	This product is not expected to cause teratogenic effects in humans.								
Reproductive Toxicity:	This product is not expected to cause reproductive harm in humans.								
11.6	Irritancy of Product: NA								
11.7	Biological Exposure Indices: NA								
11.8	Physician Recommendations: Treat symptomatically.								

12. ECOLOGICAL INFORMATION

12.1	Environmental Stability: The manufacturer has not reported any detailed studies on the environmental fate of the material. However, prudent practice would dictate the material not be allowed to enter the environment.
12.2	Effects on Plants & Animals: The manufacturer has not reported any animal or plant effects
12.3	Effects on Aquatic Life: The manufacturer has not reported any aquatic life effects.

13. DISPOSAL CONSIDERATIONS

13.1	Waste Disposal: Dispose of in accordance with federal, state & provincial hazardous waste laws.
13.2	Special Considerations: If the material is unsuitable for recycling or reclamation, enclosed-controlled incineration is recommended unless otherwise prohibited by local ordinance.

14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND): NOT REGULATED	
14.2	IATA (AIR): NOT REGULATED	
14.3	IMDG (OCN): NOT REGULATED	
14.4	TDGR (Canadian GND): NOT REGULATED	
14.5	ADR/RID (EU): NOT REGULATED	
14.6	MEXICO (SCT): NOT REGULATED	

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15. REGULATORY INFORMATION

15.1 SARA Reporting Requirements:

This product does not contain any substances subject to SARA reporting requirements.

15.2 SARA Threshold Planning Quantity:

NA

15.3 TSCA Inventory Status:

The components of this product are listed on the TSCA inventory.

15.4 CERCLA Reportable Quantity (RQ):

NA

15.5 Other Federal Requirements:

NA

15.6 Other Canadian Regulations

All chemical substances of this product are listed on the CEPA DSL/NDSL or are exempt from list requirements. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.



15.7 State Regulatory Information:

NA

15.8 67/548/EEC (European Union) Requirements:

The primary components of this product are NOT listed in Annex I of EU Directive 67/548/EEC.



16. OTHER INFORMATION

16.1 Other Information:

NA

16.2 Terms & Definitions:

See last page of this Material Safety Data Sheet.

16.3 Disclaimer:

This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & Lane Automotive's knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.

16.4 Prepared for:

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DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these that are commonly used include the following:

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number
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EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists
TLV	Threshold Limit Value
OSHA	U.S. Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
IDLH	Immediately Dangerous to Life and Health

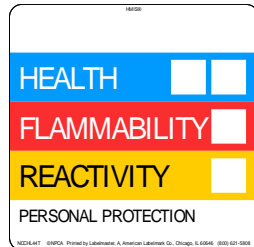
FIRST AID MEASURES:

CPR	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.
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HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard



PERSONAL PROTECTION RATINGS:

A		G	
B		H	
C		I	
D		J	
E		K	
F		X	Consult your supervisor or S.O.P. for special handling directions.

Safety Glasses	Splash Goggles	Face Shield & Eye Protection	Gloves
Boots	Synthetic Apron	Full Suit	Dust Respirator
Full Face Respirator	Dust & Vapor Half-Mask Respirator	Full Face Respirator	Airline Hood/Mask or SCBA

Note: the dotted circle indicates that this respiratory protective equipment is required for high concentrations or for large volume spills or releases of product.

OTHER STANDARD ABBREVIATIONS:

NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus

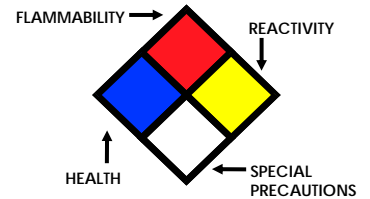
NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:

Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
-W	Use No Water
OX	Oxidizer



TOXICOLOGICAL INFORMATION:

LD₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
LC₅₀	Lethal concentration (gases) which kills 50% of the exposed animal
ppm	Concentration expressed in parts of material per million parts
TD₁₀	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TD₁₀, LD₁₀, & LD₀ or TC, TC₀, LC₁₀, & LC₀	Lowest dose (or concentration) to cause lethal or toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TL_m	Median threshold limit
log K_{ow} or log K_{oc}	Coefficient of Oil/Water Distribution

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System
DOT	U.S. Department of Transportation
TC	Transport Canada
EPA	U.S. Environmental Protection Agency
DSL	Canadian Domestic Substance List
NDSL	Canadian Non-Domestic Substance List
PSL	Canadian Priority Substances List
TSCA	U.S. Toxic Substance Control Act
EU	European Union (European Union Directive 67/548/EEC)

EC INFORMATION:

C	E	F	N	O	T+	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful