REGULATORY LISTS: o1=SARA 313 02=MASS RTK 03=NTP Carcinogen 04=CA Prop. 65 05=MI 406 06=IARC Group 1 07=IARC Group 2A 08=IARC Group 2B 09=SARA 302/304 10=PA RTK 11=NJ RTK 12=CERCLA 302.4 13=MN RTK 14=ACGIH TLV 15=ACGIH STEL 16=ACGIH Calculated TLV 17=OSHA PEL 18=OSHA STEL 19=EPA Carcinogen 20=TSCA SECT 4 21=TSCA SECT 5 SNUR 22=TSCA SECT 6 RULE 23=TSCA SECT 12 EXPORT 24=TSCA SECT 8A CAIR 25=TSCA SECT 8D REPORT 26=TSCA SECT 8E 27=Canadian WHMIS

11. PRODUCT TOXICOLOGY DATA

EYE CONTACT:

No product toxicology data available. The hazard evaluation was based on data from similar materials. SKIN IRRITATION:

No product toxicology data available. The hazard evaluation was based on data from similar materials. DERMAL TOXICITY:

No product toxicology data available. The hazard evaluation was based on data from similar materials. RESPIRATORY/INHALATION:

No product toxicology data available. The hazard evaluation was based on data from similar materials INGESTION:

No product toxicology data available. The hazard evaluation was based on data from similar materials

12. ADDITIONAL HEALTH DATA

ADDITIONAL HEALTH DATA COMMENT:

No significant health effects were observed in a chronic feeding study conducted for the National Toxicology Program (NTP) where mice and rats were fed diets containing either 2% or 4% GILSONITE for their lifetimes. In another study, 10% GILSONITE in benzene applied 3 times a week for 80 weeks to the skin of mice caused no increase in skin cancer over what was observed in the control group. In a third study, a sample of GILSONITE heated to 550°F (288°C) and cooled was not found to be mutagenic in the Ames assay. The National Institute for Occupational Safety and Health was unable to detect polynuclear aromatic hydrocarbons in GILSONITE. The information presented above suggests that GILSONITE has a low order of toxicity and is not carcinogenic.

Although ER Resin is not a carcinogen, processes in which GILSONITE is brought to very high temperatures may alter its complex hydrocarbon structure and may produce carcinogenic substances. Thermal cracking of complex hydrocarbon is known to produce polynuclear aromatic hydrocarbons, some of which are known to be carcinogenic and mutagenic. Ames mutagenicity screening tests were conducted on samples of GILSONITE which were heated. A sample heated to 650°F (343°C) and allowed to cool was found to be mutagenic. In another study, GILSONITE distilled at approximately 2500°F (1371°C) and dissolved in benzene was carcinogenic when applied 3 times a week for 80 weeks to the skin of mice.

Handling ER Resin is not expected to cause cancer. However, skin contact and breathing of vapor or mists derived from certain processes in which ER Resin is heated to high temperatures should be avoided. Please refer to the Special Precautions section of this document.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination for the suitability of the material for his particular purpose.



