



U.S. DEPARTMENT OF LABOR Occupational Safety and Health Administration		Form Approved OMB No. 44-R1387
MATERIAL SAFETY DATA SHEET 1101		
Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)		

SECTION I	
MANUFACTURER'S NAME Richard Klinger Inc.	EMERGENCY TELEPHONE NO. (513) 498-1181
ADDRESS (Number, Street, City, State, and ZIP Code) 2350 Campbell Road Sidney, Ohio 45365	
CHEMICAL NAME AND SYNONYMS Compressed Rubber Bonded Asbestos Sheet Packing	TRADE NAME AND SYNONYMS Klinger K-62 Black
CHEMICAL FAMILY Mixture of SBR Rubber and Asbestos	FORMULA N/A

SECTION II - HAZARDOUS INGREDIENTS					
PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS Carbon Black	0.5%	1.5 3.5 mg/M ³	BASE METAL		N/A
CATALYST		N/A	ALLOYS		N/A
VEHICLE		N/A	METALLIC COATINGS		N/A
SOLVENTS		N/A	FILLER METAL PLUS COATING OR CORE FLUX		N/A
ADDITIVES		N/A	OTHERS		N/A
OTHERS		N/A			
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)
Chrysotile Asbestos CAS #1332-21-4				70-90	#1
Styrene Butadiene Polymer CAS #9003-55-8				8-15	#2
Carbon Black CAS #1333-86-4				5-15	3.5 mg/M ³
#1 - Two fibers/cc greater than 5 um in length. #2 - No TLV established.					

SECTION III - PHYSICAL DATA			
BOILING POINT (°F.)	Decomposes	SPECIFIC GRAVITY (H ₂ O=1)	1.65-1.85
VAPOR PRESSURE (mm Hg.)	N/A	PERCENT VOLATILE BY VOLUME (%)	N/A
VAPOR DENSITY (AIR=1)	N/A	EVAPORATION RATE (_____ =1)	N/A
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR Black with white spots.			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA			
FLASH POINT (Method used)	N/A	FLAMMABLE LIMITS	N/A
EXTINGUISHING MEDIA Water, Carbon Dioxide, Dry Powder, or Foam.		Lel	Uel
SPECIAL FIRE FIGHTING PROCEDURES Firefighters should use self-contained breathing equipment and eye protection for the rubber fumes.			
UNUSUAL FIRE AND EXPLOSION HAZARDS The rubber, once ignited may need extra cooling to prevent reignition.			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE (TLV) - Asbestos - 8 hour TWA (Time Weighted Average) of 2 fibers/cc greater than 5 um in length.

EFFECTS OF OVEREXPOSURE - The material in its finished form presents no known health hazard. A chronic health hazard may be created if further processing of the sheet allows asbestos fibers to be released into the atmosphere. Inhalation of free asbestos fiber over a long period of time can cause lung disorders, including asbestosis, pleural plaque, lung cancer, and mesothelioma.

SECTION VI - REACTIVITY DATA

STABILITY - The material has infinite storage stability.

INCOMPATIBILITY - Strong oxidizers, strong acids, or bases.

HAZARDOUS DECOMPOSITION PRODUCTS - Burning rubber (See Section IV), and free asbestos (See Section V).

HAZARDOUS POLMERIZATION will not occur.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED - Dust from sheet should be treated as free asbestos. Secure area and clean up using HEPA-filtered vacuum, or wet sweep. DO NOT clean up in a method that generates dust into atmosphere.

WASTE DISPOSAL METHOD - Bury in solid landfill as required by 29 CFR 1910.1001 (N)(2).

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION - None required where local controls ensure negligible asbestos dust released into atmosphere. Where local controls not adequate, use respirator approved pursuant to 29.CFR 1910.1001 (D)(2). See section IX - Special Precautions.

VENTILATION - Where dust producing processes are used, local ventilation, air filtration and good work hygiene must be used to ensure negligible asbestos dust released to atmosphere.

EYE PROTECTION - None required for normal use.

OTHER PROTECTIVE EQUIPMENT - None required for normal handling or fitting of gaskets. Where gasket removal involves scraping, wire brushing, or other potential dust producing operations; local ventilation, air filtration, good work hygiene, and where applicable, wetting down should be used to ensure negligible asbestos dust released to atmosphere.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING - In the manufacture of Klinger compressed asbestos sheet packing, the asbestos is encapsulated into the sheet by a rubber matrix. In normal handling of sheet and cut gaskets, no significant release of asbestos dust occurs. In the production of cut gaskets; local ventilation, air filtration, and good work hygiene must be used where the production process may release fibers into the workplace. The material must not be drilled, sawed, ground, sanded, or subjected to any other dust producing process without the necessary equipment required to ensure that released fibers are contained.

SECTION X - DATE AND SOURCE OF INFORMATION

UTEX 000306

DATE - November 20, 1985 NAME - Derek Coomber, Vice President ISSUE #85-01

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	N/A (See IX Below)
EFFECTS OF OVEREXPOSURE	
EMERGENCY AND FIRST AID PROCEDURES	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Infinite Storage stability
INCOMPATIBILITY (Materials to avoid) Strong Oxidizers/Acids/Alkalis			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	N/A
WASTE DISPOSAL METHOD	Sanitary landfill in accordance with State and Federal Regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) None required		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES None required		EYE PROTECTION None required
OTHER PROTECTIVE EQUIPMENT		
Special precaution not needed in normal handling or fitting of sheet gasket. (See IX below)		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	If drilled, sawed, sanded, ground or subjected to any other dust producing process, dust level not to exceed 10 MG/M ³ . (Nuisance Dust)
OTHER PRECAUTIONS	