

MATERIAL SAFETY DATA SHEET

SECTION I

PRODUCT NAME OR NUMBER (as it appears on label) YUMARK ER-24	DATE December 1999
MANUFACTURER'S NAME YUMA INDUSTRIES INCORPORATED	EMERGENCY PHONE # YUMA 317-398-9862 CHEMTREC 800-424-9300
ADDRESS (Number, Street, City, State, & Zip Code) 783 W. Mausoleum Road, Shelbyville, IN 46176 – 9720	
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZ. CLASS, HAZ. ID # None	
ADDITIONAL HAZARD CLASSES (as applicable) None	
CHEMICAL FAMILY Water Miscible Metalworking Fluid Concentrate	FORMULA See Section II

SECTION II – INGREDIENTS

CAS REGISTRY#	Wt. %	CHEMICAL NAME	Listed as a carcinogen in NTP, IARC, or OSHA 1910 (specify)
64742-52-5	40-59	Petroleum lubricating oil base stock OSHA(PEL): TWA=5mg/m ³ for oil mist in air ACGIH(TLV): TWA=5mg/m ³ for oil mist in air	Not listed
141-43-5	1-9	Monoethanolamine OSHA(PEL): TWA=3mg/m ³ for oil mist in air ACGIH(TLV): TWA=3mg/m ³ , STEL= 6mg/m ³	Not listed
102-71-6	1-9	Triethanolamine ACGIH(TLV): TWA=5mg/m ³	Not listed
Balance classified as non-hazardous Ingredients			

SECTION III – PHYSICAL DATA

BOILING POINT Not available	SPECIFIC GRAVITY (H ₂ O=1) @20°C 0.95	ODOR THRESHOLD (ppm) Not available
VAPOR PRESSURE Not available	PERCENT VOLATILE (Vol. %) Not available	PERCENT SOLID (Wt. %) Not available
VAPOR DENSITY Not available	EVAPORATION RATE Not available	FREEZING POINT (°C) Not available
SOLUBILITY IN WATER 100%	pH (4%) 10.1	MATERIAL IS Liquid
APPEARANCE & ODOR Brown with mild odor	VOLATILE ORGANIC COMPOUNDS (VOC) Not available	

SECTION IV – FIRE AND EXPLOSION HAZARD DATA

FLASH POINT None	METHOD USED	FLAMMABLE LIMITS LEL/UEL Not available	AUTO-IGNITION TEMPERATURE (°C) Not available
EXTINGUISHING MEDIA As appropriate for surrounding fire			
SPECIAL FIRE FIGHTING PROCEDURES None			
UNUSUAL FIRE AND EXPLOSION HAZARDS None			

SECTION V – HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE See Section II		
EFFECTS OF OVEREXPOSURE – Conditions to avoid Transient eye irritation. Possible skin defatting and subsequent irritation on repeated or prolonged contact.		
PRIMARY ROUTES OF ENTRY	Inhalation:	Eye Contact:
	Skin Contact: X	Ingestion:
EMERGENCY AND FIRST AID PROCEDURES		
EYES: Flush with cool, clean water for at least 15 minutes.		
SKIN: Wash with soap and warm water.		
INHALATION: Remove to fresh air.		
INGESTION: If large quantities are ingested, pump stomach.		
In every case get medical attention as required.		

SECTION VI – REACTIVITY DATA

STABILITY: UNSTABLE:	HAZARDOUS	MAY OCCUR:
STABLE : X	POLYMERIZATION	WILL NOT OCCUR: X
CONDITIONS TO AVOID None		
INCOMPATIBILITY (MATERIALS TO AVOID) Avoid strong oxidizing agents, strong acids and nitrites.		
HAZARDOUS DECOMPOSITION PRODUCTS Thermal decomposition may produce CO, CO ₂ , NO _x and SO _x .		

SECTION VII – SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Mop up or use dry absorbent.
WASTE DISPOSAL METHOD Dispose in accordance with local, state and federal regulations.

SECTION VIII – SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type) None	
VENTILATION Local exhaust (Specify rate): Not normally required. Special: None Mechanical (general) (Specify rate): General room ventilation should be sufficient. Other: None	
PROTECTIVE GLOVES (Specify type) None	EYE PROTECTION (Specify type) Safety glasses
OTHER PROTECTIVE EQUIPMENT None	

SECTION IX – SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Keep container closed. Wash thoroughly after handling.
OTHER PRECAUTIONS None