MATERIAL SAFETY DATA SHEET

(Approved by U.S. Department of Labor "Essentially Similar" to Form LSB OOS 4)

DPM 535

CHEMICAL NAME: METHYL ETHYL KETONE

SYNONYMS: 2-Butanone

CHEMICAL FAMILY: Ketones

FORMULA: $CH_3COC_2H_5$

MOLECULAR WEIGHT: 72.10

TRADE NAME AND SYNONYMS: Methyl Ethyl Ketone

I. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	79.6°C. (175.3°F.)	FREEZING POINT	86.3°C.
SPECIFIC GRAVITY (H_2O = 1)	0.8061 at 20/20°C.	VAPOR PRESSURE AT 20°C.	70 mm. Hg
VAPOR DENSITY (air = 1)	2.5	SOLUBILITY IN WATER, % by wt at 20°C.	26.8
PER CENT VOLATILES BY VOLUME	100	EVAPORATION RATE (Butyl Acetate = 1)	5.7
APPEARANCE AND ODOR	Clear liquid; nonresidual odor.		

II. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV (Unit
Not applicable		

III. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (test method)	22°F., Tag open cup	AUTOIGNITION TEMPERATURE	960°F		
FLAMMABLE LIMITS IN AIR, % by volume		LOWER	1.8	UPPER	10

EXTINGUISHING MEDIA	Use carbon dioxide or dry chemical for small fires. Use alcohol-type foam for large fires.
SPECIAL FIRE FIGHTING PROCEDURES	None
UNUSUAL FIRE AND EXPLOSION HAZARDS	None

EMERGENCY PHONE NUMBERS

Dr. C. U. Dernehl, 212/551-4785; 914/946-0646 (night)
Dr. K. S. Lane, 212/551-4787; 914/666-3656 (night)
C. P. Carpenter, Ph.D., 412/327-1020; 412/241-7896 (night)

Legal responsibility is assumed only for the facts that [illegible]

IV. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	200 ppm.
EFFECTS OF OVEREXPOSURE	Irritation of nose, throat and eyes. Headache, nausea, vomiting.
EMERGENCY AND FIRST AID PROCEDURES	Remove to fresh air and call a physician. Flush skin and eye contact with water. If swallowed, induce vomiting and call a physician.

V. REACTIVITY DATA

STABILITY			
UNSTABLE	STABLE	CONDITIONS TO AVOID	None
—	✓		

INCOMPATIBILITY (materials to avoid)	None
HAZARDOUS DECOMPOSITION PRODUCTS	Thermal decomposition may produce carbon monoxide and/or carbon dioxide.

HAZARDOUS POLYMERIZATION			
May Occur	Will not Occur	CONDITIONS TO AVOID	None
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VI. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Eliminate all sources of ignition. Flush with large volumes of water.
WASTE DISPOSAL METHOD	Atomize into an incinerator.

VII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)		All-purpose canister mask. Chemical cartridge respirator.		
VENTILATION	LOCAL EXHAUST	Preferred	SPECIAL	None
	MECHANICAL (general)	Acceptable	OTHER	None
PROTECTIVE GLOVES		Rubber gloves	EYE PROTECTION	Face shield
OTHER PROTECTIVE EQUIPMENT		None		

VIII. SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING	METHYL ETHYL KETONE WARNING! FLAMMABLE. BREATHING OF VAPORS MAY BE HARMFUL. LIQUID AND VAPOR CAUSE EYE IRRITATION. Keep away from heat, sparks, and fire. Do not leave container open. Use with adequate ventilation. Avoid prolonged or repeated breathing of vapor. Avoid prolonged or repeated contact with skin. Avoid contact with eyes. FOR INDUSTRY USE ONLY
OTHER HANDLING AND STORAGE CONDITIONS	