

U. S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME MONSANTO COMPANY		EMERGENCY TELEPHONE NO. (314) 694-1000
ADDRESS (Number, Street, City, State, and ZIP Code) 800 North Lindbergh Boulevard, St. Louis, Missouri 63166		
CHEMICAL NAME AND SYNONYMS		TRADE NAME AND SYNONYMS Skydrol [®] 500B
CHEMICAL FAMILY Aircraft hydraulic fluid	FORMULA	

SECTION II. HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
At ambient temperature not hazardous by definitions in 29 CFR Section 1501.2 which pertains to this data sheet.		

SECTION III. PHYSICAL DATA

BOILING POINT (°F) 760mm (with decomp) ~350°C	SPECIFIC GRAVITY (H ₂ O=1) 25/25°C	1.062
VAPOR PRESSURE (mm Hg.) 72°F	PERCENT VOLATILE BY VOLUME (%)	N.A.
VAPOR DENSITY (AIR=1) N.A.	EVAPORATION RATE (1 = 1)	N.A.
SOLUBILITY IN WATER	Negligible	
APPEARANCE AND ODOR Clear purple liquid - Mild pleasant odor.		

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) COC >350°F	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA Dry powder, CO₂, chemical foam, water fog.			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

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SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE Not established

EFFECTS OF OVEREXPOSURE
Impossible at ambient temperature. Excessive high temperature may produce irritating vapors.

EMERGENCY AND FIRST AID PROCEDURES
Unlikely to be necessary. Remove to fresh air.

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATABILITY (Materials to avoid) None

HAZARDOUS DECOMPOSITION PRODUCTS Smoke, soot, CO, CO₂

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII PHYSICAL DATA

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Clean up like other liquids-such as petroleum oils.

WASTE DISPOSAL METHOD
Same as motor oil.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
Not necessary due to low vapor pressure at ambient temp.

VENTILATION	LOCAL EXHAUST <u>If excessively high temp. or if generated as mist or aerosol</u>	SPECIAL
	MECHANICAL (General) <u>Not necessary</u>	OTHER

PROTECTIVE GLOVES Not necessary

EYE PROTECTION Not necessary except as good industrial practice.

OTHER PROTECTIVE EQUIPMENT None

SECTION IX SPECIAL PRECAUTIONS See attached statement

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Although no special precautions appear necessary, good industrial practice as to housekeeping, personal hygiene, avoidance of prolonged and repeated skin contact and splashing in eyes is indicated.

OTHER PRECAUTIONS

PAGE (2) While the information and recommendations set forth herein are believed to be accurate as of the date thereof, MONSANTO COMPANY MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

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Rev. April 72

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STLCOPCB4062733

Monsanto

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TOXICITY AND SAFE HANDLING STATEMENT

SKYDROL 500 B

In toxicity screening studies, the oral LD₅₀ in rats has been found to be approximately 2500 milligrams per kilogram and 3200 milligrams per kilogram in the case of rabbits. These dosages allow the classification of the product as "slightly toxic" from the standpoint of accidental ingestion of single doses. It is not readily absorbed through the skin and animals subjected to saturated vapors for a period of eight weeks showed no ill effects.

Human repeated insult patch tests have shown Skydrol 500B to be neither a primary irritant nor sensitizer. It is an excellent solvent and when tested repeatedly on the skin of animals, it caused a drying action much like paint remover. In the standard skin irritation potential study, a score of 1.1 out of a maximum 8.0 developed after 48 hours contact. The score obtained in standard eye irritation potential studies was 18.0 out of a possible 110.0. (This is equivalent to a 10% toilet soap solution.) We know from experience with humans, however, that the burning sensation and pain when humans accidentally get the material in the eyes is out of proportion to the low score obtained in animals. In the case of such accidental exposure, pain may continue for several hours and irritation may extend up to 48-72 hours. There is no danger of permanent effect to eye tissues, however.

The treatment for eye contact is immediate flushing with copious amounts of water and the instillation of a few drops of an ophthalmic anesthetic solution and application of cold compresses.

There have been no cases of systemic toxicity with Skydrol 500B and its predecessor since its introduction. In manufacturing, our workers treat the fluid as an ordinary industrial chemical, observing only the precautions to prevent accidental contact with eye tissues and avoiding prolonged and repeated skin contact.



R. Emmet Kelly, M. D.
Medical Director

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3/12/73

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