

LWYER INSTRUMENTS INC.
MATERIAL SAFETY DATA SHEET
DATE PREPARED 4-16-91

SECTION I (MATERIAL IDENTIFICATION)

NAME: RED GAGE OIL
MANUFACTURER: LWYER INSTRUMENTS INC.
P.O. BOX 373
MICHIGAN CITY, IN 46360
TELEPHONE: (219) 879-8000
PRODUCT NUMBER: 71-440133 00
HAZARDS: HEALTH (2) FLAMMABILITY (2) REACTIVITY (0) PP (B)
WHMIS CLASSIFICATION: CLASS D DIVISION 1 SUBDIVISION B
TDG CLASSIFICATION: CLASS 6 DIVISION 1

SECTION II (HAZARDOUS INGREDIENTS)

COMPONENTS	CAS NUMBER	NOTE	PERCENT
LWYER RED GAGE OIL	MIXTURE		100
1 PETROLEUM HYDROCARBON	64742-47-8	(2)	40-70
2 SOLVENT REFINED, HYDROTREATED, MIDDLE DISTILLATE	64742-46-7	(3)	15-40
3 SOLVENT REFINED, HYDROTREATED, HEAVY NAPHTHENIC DISTILLATE	64742-52-5	(3)	1-5
4 POLYMERIC ADDITIVE IN OIL	MIXTURE	(1)	3-7
5 MINOR ADDITIVES	MIXTURE	(1)	0.1-1.0
6 RED DYE	N/A	(1)	0.1-1.0

NOTES:

- (1) BASED ON THE DATA AVAILABLE TO LWYER, THESE COMPONENTS IN THIS PRODUCT ARE NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200)
- (2) THIS COMPONENT IS HAZARDOUS AS DEFINED IN OSHA HAZARD COMMUNICATIONS (29 CFR 1910.1200). COMBUSTIBLE.
- (3) TOXICITY DATA NOT AVAILABLE FOR THIS COMPONENT.

SECTION III (PHYSICAL DATA)

BOILING POINT: NOT AVAILABLE
VAPOR PRESSURE: NOT AVAILABLE
VAPOR DENSITY (AIR=1): NOT AVAILABLE
SOLUBILITY IN WATER: NEGLIGIBLE
SPECIFIC GRAVITY (H₂O=1) @ (70 F): .826
% VOLATILITY BY VOLUME: NOT AVAILABLE
EVAPORATION RATE (N-BUTYL ACETATE =1): NOT AVAILABLE
APPEARANCE AND ODOR: RED LIQUID WITH SLIGHT HYDROCARBON ODOR

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EYE CONTACT: SLIGHTLY IRRITATING BUT DOES NOT INJURE EYE TISSUE.
SKIN CONTACT: LOW ORDER OF TOXICITY. FREQUENT OR PROLONGED CONTACT MAY LEAD TO VARIOUS SKIN DISORDERS SUCH AS: OIL ACNE, DERMATITIS OR FOLLICULITIS.
INHALATION: HIGH VAPOR CONCENTRATIONS ARE IRRITATING TO THE EYES AND THE RESPIRATORY TRACT. MAY CAUSE HEADACHES AND DIZZINESS. ARE ANESTHETIC AND MAY HAVE OTHER CENTRAL NERVOUS SYSTEM EFFECTS.
INGESTION: MINIMAL TOXICITY. SMALL AMOUNTS OF THE LIQUID ASPIRATED INTO THE RESPIRATORY SYSTEM DURING INGESTION OR FROM VOMITING MAY CAUSE BRONCHOPNEUMONIA OR PULMONARY EDEMA.
AGGRAVATED MEDICAL CONDITIONS: PREEEXISTING SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED EXPOSURE TO THIS PRODUCT.

SECTION V (EMERGENCY AND FIRST AID PROCEDURES)

EYE CONTACT: FLUSH EYES WITH LARGE AMOUNTS OF WATER UNTIL IRRITATION SUBSIDES. GET MEDICAL ATTENTION.
SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS OFF. WASH WITH SOAP AND WATER OR A WATERLESS HAND CLEANER FOLLOWED BY SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.
INHALATION: USING PROPER RESPIRATORY PROTECTION, REMOVE THE VICTIM FROM THE EXPOSED AREA. PROVIDE OXYGEN IF BREATHING IS DIFFICULT OR C.P.R. IF BREATHING HAS STOPPED. GET MEDICAL ATTENTION.
INGESTION: IF SWALLOWED, DO NOT INDUCE VOMITING! KEEP AT REST. GET PROMPT MEDICAL ATTENTION.
NOTE TO THE PHYSICIAN: IN GENERAL, EMESIS INDUCTION IS UNNECESSARY IN HIGH VISCOSITY, LOW VOLATILITY PRODUCTS, I.E., MOST OILS AND GREASES.

SECTION VI (SUPPLEMENTAL HEALTH INFORMATION)

IT HAS BEEN REPORTED TO THE U.S. EPA PURSUANT TO SECTION 8(C) OF TSCA THAT A SAMPLE OF HYDROTREATED MIDDLE DISTILLATE (CAS REGISTRY NUMBER 64742-46-7) APPLIED REPEATEDLY TO THE SKIN OF EXPERIMENTAL ANIMALS OVER THEIR LIFETIME PRODUCED A WEAK TUMORIGENIC RESPONSE IN THE SKIN. THE FULL REFINING/PROCESS HISTORY WAS NOT PROVIDED IN THIS SUBMISSION.

LABORATORY ANIMAL STUDIES HAVE SHOWN THAT PROLONGED AND REPEATED INHALATION EXPOSURE TO LIGHT HYDROCARBON VAPORS IN THE SAME NAPHTHA BOILING RANGE AS THIS PRODUCT CAN PRODUCE ADVERSE KIDNEY EFFECTS IN MALE RATS. HOWEVER, THESE EFFECTS WERE NOT OBSERVED IN SIMILAR STUDIES WITH FEMALE RATS AND MALE AND FEMALE MICE AND IN LIMITED STUDIES WITH OTHER ANIMAL SPECIES. ADDITIONALLY IN A NUMBER OF HUMAN STUDIES, THERE WAS NO CLINICAL EVIDENCE OF SUCH EFFECTS AT NORMAL OCCUPATIONAL LEVELS. IT IS THEREFORE HIGHLY UNLIKELY THAT THE KIDNEY EFFECTS OBSERVED IN MALE RATS HAVE SIGNIFICANT IMPLICATIONS FOR HUMANS EXPOSED AT OR BELOW RECOMMENDED VAPOR LIMITS IN THE WORKPLACE.

SECTION VII (OCCUPATIONAL EXPOSURE LIMITS AND PROTECTIVE EQUIPMENT)

NO.	PEL/TWA	PEL/CEILING	TLV/TWA	TLV/STEL
F	5 MG/M ³	NONE	5 MG/M ³	10 MG/M ³

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VENTILATION: THE USE OF MECHANICAL DILUTION VENTILATION IS RECOMMENDED WHENEVER THIS PRODUCT IS USED IN A CONFINED SPACE.
RESPIRATORY PROTECTION: IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS, USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. THE REGULATOR SELECTED SHOULD BE SUITABLE FOR ORGANIC VAPORS AND PARTICULATES.
EYE PROTECTION: SAFETY GLASSES WITH SIDE SHIELDS OR GOGGLES.
PROTECTIVE GLOVES: NEOPRENE.
OTHER PROTECTIVE EQUIPMENT: IMPERVIOUS CLOTHING OR APRON.

SECTION VIII (FIRE FIGHTING)

EXTINGUISHING MEDIA: USE WATER FOG, FOAM, DRY CHEMICAL OR CO₂. DO NOT USE DIRECT STREAM OF WATER. USE WATER SPRAY ONLY TO PROTECT PERSONNEL AND COOL FIRE EXPOSED SURFACES AND CONTAINERS. PRODUCT CAN BE REIGNITED ON THE SURFACE OF THE WATER.
SPECIAL PRECAUTIONS: DO NOT ENTER CONTAINED FIRE-SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE-PRESSURE NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS.

SECTION IX (REACTIVITY DATA)

STABILITY: STABLE
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR
CONDITIONS AND MATERIALS TO AVOID: OPEN FLAMES AND OXIDIZING MATERIALS
HAZARDOUS DECOMPOSITION: AIRBORNE SOLID, LIQUID, PARTICULATES AND GASES WILL BE EMITTED DURING PYROLYSIS OR COMBUSTION. CARBON DIOXIDE AND OTHER UNKNOWN ORGANIC COMPOUNDS MAYBE FORMED UPON COMBUSTION.

SECTION X (SPILL OR LEAK PROTECTION)

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

- 1) ELIMINATE ALL POSSIBLE IGNITION SOURCES.
- 2) PREVENT ADDITIONAL DISCHARGE OF MATERIAL
- 3) SOAK UP SPILL WITH A NON COMBUSTIBLE ABSORBANT
- 4) DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

SECTION XI (SPECIAL PRECAUTIONS)

- 1) STORE IN "COMBUSTIBLES STORAGE AREA"
- 2) IN ACCORDANCE WITH GOOD INDUSTRIAL PRACTICE HANDLE WITH CARE AND AVOID PERSONAL CONTACT.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, LUYER INSTRUMENTS MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. LUYER INSTRUMENTS ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.