

U.S. Oil Co., Inc.

Lubricants Division

425 S. Washington St. Combined Locks, WI 54113
Phone 920-735-8298

MATERIAL SAFETY DATA SHEET

PRODUCT TRADE NAME: Synthetic AW

REVISION NUMBER:
PREPARATION/REVISION DATE: 5/30/03
REVISED FROM (DATE): 2/17/03

EMERGENCY PHONE #: (920)-735-8298
NFPA CODE: Health: 1 Fire: 1 Reactivity: 0
HMIS CODE: Health: 1 Fire: 1 Reactivity: 0

SECTION 1 – COMPOSITION / INFORMATION ON INGREDIENTS

OSHA Hazard Communication Standard (29 CFR 1910.1200)

This product is not formulated to contain ingredients that have exposure limits exceeding those established by US agencies.

SECTION 2 - FIRE AND EXPLOSION HAZARDS

FLAMMABILITY PROPERTIES:

	ISO 10	ISO 15	ISO 22	ISO 32	ISO 46	ISO 68
Flash	369 F	408 F	459 F	507 F	496 F	504 F
Point	187 C	209 C	237 C	264 C	258 C	262 C

	ISO 100	ISO 150	ISO 220	ISO 320	ISO 460	ISO 680
Flash	507 F	529 F	546 F	550 F	529 F	543 F
Point	264 C	276 C	272 C	288 C	276 C	284 C

Method	COC ASTM D-92
LFL/UFL	Not Determined
Auto-ignition Temperature	Not Determined

EXTINGUISHING MEDIA:

CO₂, dry chemical and alcohol foam.

SPECIAL FIRE FIGHTING PROCEDURES:

Full bunker gear recommended including a positive pressure self-contained breathing apparatus.

SECTION 3 - HEALTH HAZARD DATA

POTENTIAL HEALTH EFFECTS: Minor eye, inhalation and skin irritant.

« ACUTE EXPOSURE »

EYE IRRITATION: Moderate to strong eye irritation. Based on data from components or similar material.

SKIN IRRITATION: Not expected to be a primary skin irritant. Based on data from components or similar material. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

RESPIRATORY IRRITATION: If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract similar to that observed with mineral oil. Based on data from components or similar materials. Under good industrial hygiene practices where all exposure limits are observed respiratory irritation should not be a problem.

« CHRONIC EXPOSURE »

CHRONIC TOXICITY: No data available to indicate product present at greater than 1.0% are chronic health hazards.

CARCINOGENICITY: No data available to indicate product present at greater than 0.1% may present a carcinogenic hazard.

MUTAGENICITY: No data available to indicate product present at greater than 1.0% are mutagenic or genotoxic.

REPRODUCTIVE TOXICITY: No data available to indicate product present a greater than 1.0% that may cause reproductive toxicity.

TERATOGENICITY: No data available to indicate product present at greater than 1.0% present a teratogenic hazards.

« ADDITIONAL INFORMATION »

EXPOSURE LIMITS: Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter.

SECTION 3A - EMERGENCY FIRST AID PROCEDURES

- SKIN: Wash immediately with soap and water. Remove contaminated clothing and launder before reuse. Discard shoes and leather articles saturated with the product. Obtain medical attention if irritation develops.
- EYE: Flush with water at least 15 – 20 minutes. Seek medical attention if irritation develops.
- INHALATION: Remove exposed person to fresh air. If breathing is labored give oxygen. If breathing has stopped apply artificial respiration. Get immediate medical attention.
- INGESTION: DO NOT INDUCE VOMITING! If conscious, give 2 glasses of water. If vomiting does occur, keep head below hips to reduce risk of aspiration. Get immediate medical attention.

SECTION 4 - SPECIAL PROTECTION INFORMATION

- VENTILATION: Use adequate general or local exhaust ventilation to keep airborne concentrations below exposure limits.
- EYE: Use splash goggles or face shield where splashing is expected or can occur.
- RESPIRATORY: Use a NIOSH approved respirator when necessary.
- SKIN: Use Viton or Nitrile gloves to avoid prolonged or repeated skin contact.

EXPOSURE LIMITS: The Threshold Limit Value (TLV) of 5 mg/m³ is suggested for oil mist.

SECTION 5 - PHYSICAL & CHEMICAL PROPERTIES

	ISO 10	ISO 15	ISO 22	ISO 32	ISO46	ISO 68
Physical State	Liquid					
Boiling Point	Not Determined					
Freezing / Melting Point	-96 F -71 C	-96 F -71 C	-96 F -71 C	-71 F -57 C	-65 F -57 C	-60 F -51 C
Vapor Pressure	Negligible					
Vapor Density (Air= 1)	Not Determined					
Evaporation Rate	Not Determined					
Solubility in Water	Negligible					
Specific Gravity (Water=1)	0.8193	0.8234	0.8319	0.8473	0.8519	0.8565
Density, lb/gal	6.822	6.930	6.926	7.055	7.093	7.132
Volatility (Volume)	Not Determined					
VOC	Not Determined					
pH	Essentially Neutral					
Odor	Mild, Bland Hydrocarbon Odor					
Odor Threshold	Not Determined					
Appearance	Light Straw Transparent Fluid					
Viscosity, cSt @ 100 C	2.86	3.6	4.65	5.77	7.76	10.32
Viscosity, cSt @ 40 C	10.73	15.12	22.11	30.84	47.24	68.24

Viscosity Index	115	123	130	131	132	137
	ISO 100	ISO 150	ISO 220	ISO 320	ISO460	ISO 680
Physical State	Liquid					
Boiling Point	Not Determined					
Freezing / Melting Point	-54 F -48 C	-51 F -46 C	-45 F -43 C	-40 F -40 C	-35 F -37 F	-33 F -36 C
Vapor Pressure	Negligible					
Vapor Density (Air= 1)	Not Determined					
Evaporation Rate	Not Determined					
Solubility in Water	Negligible					
Specific Gravity (Water=1)	0.8597	0.8745	0.8772	0.8883	0.8838	0.8849
Density, lb/gal	7.158	7.282	7.305	7.397	7.360	7.368
Volatility (Volume)	Not Determined					
VOC	Not Determined					
pH	Essentially Neutral					
Odor	Mild, Bland Hydrocarbon Color					
Odor Threshold	Not Determined					
Appearance	Light Straw Transparent Fluid					
Viscosity, cSt @ 100 C	13.53	17.59	23.52	31.06	40.27	53.47
Viscosity, cSt @ 40 C	102.27	147.85	220.81	329.2	478.58	705.67
Viscosity Index	132	131	132	131	130	133

SECTION 6 – STABILITY & REACTIVITY

STABILITY: Stable under moderately elevated temperatures and pressures.

INCOMPATIBILITY: Avoid contact with strong oxidants.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION OF PRODUCT: Toxic oxides of carbon, aldehydes and other products of incomplete combustion.

SECTION 7 - SPILL OR LEAK PROCEDURES

SPILL PROCEDURES: Isolate spill area. Provide adequate ventilation. Wear appropriate personal protection. Recover free product for recycle and/or disposal. Add sand, earth or other suitable to spill area. Prevent entry into sewers and waterways. Check under Transportation and Labeling (DOT/CERCLA) and other Regulator Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spill.

No data available on the adverse effects of this product on the environment.

WASTE DISPOSAL: If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261.

