

MATERIAL SAFETY DATA SHEET

No. 0005

000393

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

SECTION I

MANUFACTURER'S NAME Viscosity Oil Company		EMERGENCY TELEPHONE NO. (312) 847-0224
ADDRESS (Number, Street, City, State, and ZIP Code) 3200 S. Western Avenue - Chicago, Illinois 60608		
CHEMICAL NAME AND SYNONYMS Blended petroleum based material		TRADE NAME AND SYNONYMS IH Low Ash/Interseason Engine Oil
CHEMICAL FAMILY	FORMULA Proprietary	

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)	
Petroleum oil			80-90	5mg/M ³	
				oil mist	

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	Wide range	SPECIFIC GRAVITY (H ₂ O=1)	~0.88
VAPOR PRESSURE (mm Hg.)	Nil	PERCENT VOLATILE BY VOLUME (%)	Nil
VAPOR DENSITY (AIR=1)	>>1	EVAPORATION RATE (_____ =1)	Nil
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Dark amber liquid with petroleum odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	385° F min.	FLAMMABLE LIMITS	Not determined
EXTINGUISHING MEDIA	CO ₂ , dry chemical, chemical foam		
SPECIAL FIRE FIGHTING PROCEDURES	Wear self-contained breathing gear when fire fighting in confined spaces.		
UNUSUAL FIRE AND EXPLOSION HAZARDS	None known		

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
Petroleum oil mist: $5\text{mg}/\text{M}^3$. No TLV established for product.

EFFECTS OF OVEREXPOSURE
EYES: mild irritation. SKIN: no effects expected. INGESTION: LD50 not established
but practically non-toxic.

EMERGENCY AND FIRST AID PROCEDURES
EYES: flush with warm water for 15 minutes. See a physician. SKIN: wash well with
soap and water. INHALATION: remove to fresh air area and avoid further inhalation
INGESTION: give liquids and see a physician

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE		X

INCOMPATIBILITY (Materials to avoid)
Avoid contact with oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS
Combustion: oxides of carbon, trace oxides of S, Zn, N, P and asphyxiants

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		X

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Pick up using an oil absorbent

WASTE DISPOSAL METHOD
In accordance with federal, state and local regulations, this material can be sold
to an oil reclaimer and/or incinerated.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
Concentration of oil mist in air determines if protection is required. Use NIOSH

VENTILATION	LOCAL EXHAUST	Provide	SPECIAL
		MECHANICAL (General)	

PROTECTIVE GLOVES
Oil-impervious gloves recommended

EYE PROTECTION
Safety glasses or goggles

OTHER PROTECTIVE EQUIPMENT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Normal handling and storage of petroleum products. Do not store near sources of heat
flame or sparks

OTHER PRECAUTIONS
Avoid breathing oil mists. Persons exposed to oil mists should wear approved
respirators. Do not cut or weld on empty containers.

No. 0004

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SECTION I

MANUFACTURER'S NAME Viscosity Oil		EMERGENCY TELEPHONE NO. (312) 847-0224
ADDRESS (Number, Street, City, State, and ZIP Code) 3200 S. Western Ave. - Chicago, Illinois 60608		
CHEMICAL NAME AND SYNONYMS Blended petroleum based lubricant		TRADE NAME AND SYNONYMS IH Hy Iran Fluid B-6
CHEMICAL FAMILY Petroleum Hydrocarbon	FORMULA N/A	

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)
Petroleum Oil				80-90	5mg/M ³
				oil	mist
Note: No ingredient is a known carcinogen as defined by 29CFR 1910.1200.					
Note: Product contains a non-hazardous tri-aryl phosphate ester with an oral toxicity greater than 10 gm/kg (LD50 in rats)					

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	Wide range	SPECIFIC GRAVITY (H ₂ O=1)	0.90
VAPOR PRESSURE (mm Hg.) @ 20°C	0.12 est	PERCENT VOLATILE BY VOLUME (%)	Nil
VAPOR DENSITY (AIR=1)	12+	EVAPORATION RATE (ethyl ether =1)	1000 x's slower
SOLUBILITY IN WATER	0.03		
APPEARANCE AND ODOR	Dark fluid, characteristic petroleum odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	COC: 385°F min.	FLAMMABLE LIMITS	ND Lel	ND Uel
EXTINGUISHING MEDIA	Water fog, chemical foam, dry chemical, CO ₂			
SPECIAL FIRE FIGHTING PROCEDURES	Wear self-contained breathing gear when fire fighting in confined spaces.			
UNUSUAL FIRE AND EXPLOSION HAZARDS				
None known				

SECTION V - HEALTH HAZARD DATA	
THRESHOLD LIMIT VALUE	5.0 mg/M ³
EFFECTS OF OVEREXPOSURE EYES: moderate irritation. SKIN: practically non-toxic, prolonged contact may result in irritation. INGESTION: LD50 in rats: 20+ gm/kg. INHALATION: irritation of upper respiratory tract.	
EMERGENCY AND FIRST AID PROCEDURES EYES: Flush with water for 15 minutes. See physician. SKIN: wash well with soap and water. INHALATION: remove to fresh air. INGESTION: give liquids and induce vomiting. Call a physician.	

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Strong oxidizers			
HAZARDOUS DECOMPOSITION PRODUCTS CO, trace phosphorus fumes, oxides of sulfur and asphyxiants			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES	
1	STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Clean up using an oil absorbent. No unusual hazard.
WASTE DISPOSAL METHOD As required by federal, state and local regulations.	

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION (Specify type) Avoid breathing mist or vapors. No unusual precautions.		
VENTILATION	LOCAL EXHAUST As needed to comply with exposure limit	SPECIAL
	MECHANICAL (General)	OTHER
PROTECTIVE GLOVES Recommended for long exposure		EYE PROTECTION Face shield or goggles
OTHER PROTECTIVE EQUIPMENT		

SECTION IX - SPECIAL PRECAUTIONS	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Storage per NFPA Class III B liquid	
OTHER PRECAUTIONS	

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ADDRESS (Number, Street, City, State, and ZIP Code) 3200 S. Western Ave. - Chicago, Illinois 60608		
CHEMICAL NAME AND SYNONYMS Blended petroleum based lubricant		TRADE NAME AND SYNONYMS No. 1 Engine Oil (all grades)
CHEMICAL FAMILY Petroleum Hydrocarbon	FORMULA N/A	

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)
Petroleum Oil				80-90	5mg/M ³
				oil	mist
Note: No ingredient is a known carcinogen as defined by 29CFR 1910.1200.					

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BOILING POINT (°F.)	Wide range	SPECIFIC GRAVITY (H ₂ O=1)	0.88
VAPOR PRESSURE (mm Hg.)	Nil	PERCENT. VOLATILE BY VOLUME (%)	Nil
VAPOR DENSITY (AIR=1)	>>1	EVAPORATION RATE (_____ %)	Nil
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Dark amber liquid with petroleum odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	385°F min. (COC)	FLAMMABLE LIMITS	Not determined	Lel	Uel
EXTINGUISHING MEDIA	CO ₂ , dry chemical, chemical foam				
SPECIAL FIRE FIGHTING PROCEDURES	Wear self-contained breathing gear when fire fighting in confined spaces.				
UNUSUAL FIRE AND EXPLOSION HAZARDS	None known				

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
 Petroleum oil mist: 5mg/M³. No TLV established for product.

EFFECTS OF OVEREXPOSURE
 EYES: mild irritation. SKIN: no effects expected. INGESTION: LD50 not established but practically non-toxic.

EMERGENCY AND FIRST AID PROCEDURES
 EYES: flush with warm water for 15 minutes. See a physician. SKIN: wash well with soap and water. INHALATION: remove to fresh air area and avoid further inhalation
 INGESTION: give liquids and see a physician

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INCOMPATIBILITY (Materials to avoid)
 Avoid contact with oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS
 Combustion: oxides of carbon, trace oxides of S, Zn, N, P and asphyxiants

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 Pick up using an oil absorbent

WASTE DISPOSAL METHOD
 In accordance with federal, state and local regulations, this material can be sold to an oil reclaimer and/or incinerated.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type)
 Concentration of oil mist in air determines if protection is required. Use NIOSH

VENTILATION	LOCAL EXHAUST	Provide	SPECIAL approved respiratory
	MECHANICAL (General)		OTHER equipment

PROTECTIVE GLOVES
 Oil-impervious gloves recommended

EYE PROTECTION
 Safety glasses or goggles

OTHER PROTECTIVE EQUIPMENT

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 Normal handling and storage of petroleum products. Do not store near sources of heat, flame or sparks

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