

Blue Dye AHF

An oil soluble blue dye for use in the identification of hydraulic system leaks. At the recommended treat rate, this dye is expected to produce blue coloring in petroleum fluids.

Directions:

- Shake well before using
- Add slowly to system
- Allow sufficient time for dye to be thoroughly dispersed
- Do not add an excessive amount
- ADD 4 Ounces per 100 Gallons

Caution! Causes eye and skin irritation. Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling.

First Aid: In case of contact with eyes, wash for 10-15 minutes. If ingested, DO NOT INDUCE VOMITING GET MEDICAL ATTENTION AS SOON AS POSSIBLE.

Contains: Petroleum Hydrocarbon 43% C.A.S. 64742-94-5
Naphthalene 7% C.A.S. 91-20-3. For Emergencies call
CHEMTREC: 1-800-424-9300

Sandy Brae Laboratories
119A Sandy Drive
Newark, DE 19713 302-456-0446

MATERIAL SAFETY DATA SHEET

For Chemicals, Coatings and Related Materials
"Essentially similar" to form OSHA-20

Liquid Blue AHF

MANUFACTURER

Sandy Brae Laboratories, Inc.
119A Sandy Drive
Newark, DE 19713
ph: 302-456-0446
fx: 302-456-0441

EMERGENCY TELEPHONE NUMBERS:

Medical or Transportation
CHEMTREC (24 hrs): 800-424-9300

SECTION I - PRODUCT INFORMATION

PRODUCT NAME: Liquid Blue AHF

H M I S HAZARD CODES

DESCRIPTION: Blue dye concentrate

CLASS: Liquid

Health: 1 (Slight)
Flammability: 1 (Slight)
Reactivity: 0 (Minimal)
B

Personal Protective Equipment:

SECTION IIA - HAZARDOUS INGREDIENTS

<u>INGREDIENT</u> <u>MATERIAL DESCRIPTION</u>	<u>PERCENT</u> <u>BY WEIGHT</u>	<u>C.A.S.</u> <u>REGISTRY NO.</u>	<u>LEL</u>	<u>VAPOR PRESSURE</u> <u>mmHg @ 100°F</u>
Petroleum Hydrocarbon	43.0	64742-94-5	1.8	1.6
Naphthalene*	7.0	91-20-3	N/A	N/N

* Spillage of dye containing this material may be notifiable under SARA Title 3, Section 313. For details see SECTION IX of this MSDS.

SECTION IIB - NON HAZARDOUS INGREDIENTS

<u>INGREDIENT</u> <u>MATERIAL DESCRIPTION</u>	<u>PERCENT</u> <u>BY WEIGHT</u>	<u>C.A.S.</u> <u>REGISTRY NO.</u>	<u>LEL</u>	<u>VAPOR PRESSURE</u> <u>mmHg @ 100°F</u>
Colorant	50.0	Proprietary	N/A	N/A

SECTION III PHYSICAL DATA

BOILING RANGE: N/A
VAPOR PRESSURE: < 0.1 mm @ 68°F
SPECIFIC GRAVITY: 0.95 - 1.05
EVAPORATION RATE: < 0.1
(relative to n-butyl acetate)
APPEARANCE AND COLOR: Dark Blue, almost odorless liquid
N-OCTANOL/WATER PARTITION COEFFICIENT: Log P_{ow} expected to be greater than 100

FREEZING POINT: < 10°F
VAPOR DENSITY: 4.7
H₂O SOLUBILITY: Insoluble
% VOLATILE BY VOLUME: Zero
POUR POINT ASTM D97: < -50°F

SECTION IV - FIRE AND EXPLOSION DATA

EXPLOSIVE LIMITS: LEL UEL (%Vv IN AIR)
1.8 11.8

FLASH POINT: >200°F
METHOD USED: Pensky-Martens ASTM D 93

FLAMMABILITY CLASSIFICATION:

OSHA: Non-Combustible Liquid
DOT: Environmentally hazardous substance, liquid, N.O.S.
(Methylnaphthalenes, Liquid, Naphthalene, 9, UN 3082. III Marine Pollutant)

EXTINGUISHING MEDIA:

Use water spray to cool fire exposed to surfaces and to protect personnel. ISOLATE "Fuel" supply from fire. Use foam, dry chemical or water spray to extinguish fire. Avoid spraying water directly into storage containers due to danger of boiling over.

SPECIAL FIRE FIGHTING PROCEDURES:

- Wear NIOSH-MSHA approved self-contained breathing apparatus.
- Wear impervious clothing
- Use water spray to cool and protect exposed material or overheated containers.
- Take care not to spread fire with water.

SECTION V - TOXICOLOGICAL INFORMATION

DEFINITIONS:

- N/A - Not Available and/or Not Applicable
Tag - Tag Closed Cup (TCC)
PEL - Units of mg/cubic meter
(*) - SARA Section 313 listed. IF CHEMICAL SYMBOL * IN () MATERIAL IS A COMPOUND. Example: (*Cu) - report as copper compound.

NOTE: Please refer to the end of Section IX for Regulatory information pertaining to the determination for the listing of ingredients, CAS numbers, percentages and other information.

INGREDIENT MATERIAL DESCRIPTION	PEL	TLV (twa) mg/m ³	Ld50 (g/kg)		LC50 (ppm)
			(rat) ORAL	(rabbit) DERMAL	(rat) INHAL.
Colorant	N/A	N/A	5.0		N/A
Petroleum Hydrocarbon (mist)	N/A	N/A	N/A	Slightly	N/A
Naphthalene	N/A	N/A	N/A	irritating	N/A

SECTION VI - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE: THRESHOLD LIMIT VALUES: See Section V
 PRIMARY ROUTE(S) OF EXPOSURE/ENTRY: Eye contact, skin contact, inhalation, ingestion.
 ACUTE EFFECTS OF OVEREXPOSURE:

EYES	Vapors may irritate the eyes. Liquid is irritating and potentially damaging to the eyes.
SKIN	Liquid may irritate and dry the skin. Prolonged contact may lead to burns and blisters and may aggravate dermatitis.
INHALATION	Vapors may irritate the respiratory tract. May lead to headache, dizziness, nausea, vomiting and unconsciousness. High vapor concentrations are anesthetic and may have other central nervous system effects including death.
INGESTION	May lead to headache, dizziness, nausea and abdominal pain. -

SECTION VII - EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT:	Immediately flush with large amounts of water for 10 - 15 minutes. SEEK PROMPT MEDICAL ATTENTION!!!
SKIN CONTACT:	Promptly remove all contaminated clothing, shower if necessary. Remove from skin with proprietary water less hand cleaner or cold cream. Discard contaminated clothing and shoes.
INHALATION:	If dizzy, drowsy or overcome, remove to fresh air. If breathing has stopped, apply artificial respiration. GET MEDICAL ATTENTION AS SOON AS POSSIBLE!!!
INGESTION:	DO NOT INDUCE VOMITING!! GET MEDICAL ATTENTION IMMEDIATELY!!

SECTION VIII -REACTIVITY DATA

STABILITY:	Stable
CONDITIONS TO AVOID:	Extreme heat. Open flames or sparks
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizing agents. Strong reducing agents. Acids.
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxides of Carbon, Oxides of Nitrogen
HAZARDOUS POLYMERIZATION:	Will not occur
POLYMERIZATION CONDITIONS TO AVOID:	Material not known to polymerize

SECTION IX - REGULATORY INFORMATION

This MSDS is in compliance with OSHA Hazard Communication Standard 29CFR1910.1200. This MSDS has also been prepared to be in compliance with the Commonwealth of Pennsylvania's Right-To-Know regulations for chemical manufacturers and should satisfy many other state Right-To-Know laws.

SECTION IX - REGULATORY INFORMATION Continued

The chemical ingredient reporting rules for Pennsylvania are more detailed than OSHA regulations and this MSDS lists the common chemical name and CAS number in Section II for:

Specifically hazardous ingredient	>0.01% (OSHA is >0.1%)
Hazardous ingredient	>1.0% (OSHA is the same)
Nonhazardous ingredient	>3.0% (OSHA does not regulate)

TRADE SECRET entered in the CAS number column declares that the exact identity of the ingredient(s) listed is proprietary information to Sandy Brae Laboratories. Percentages of ingredients are approximate values for the purpose of hazard and SARA determination by the product's uses and are not necessarily exact specifications.

DEPARTMENT OF TRANSPORTATION (DOT):

DOT Shipping Description:

Environmentally Hazardous Substance, Liquid, N.O.S. (Polycyclic Organic Matter, Naphthalenes, Liquid Naphthalene, 9, UN3082, III Marine Pollutant (Methylnaphthalenes, Liquid, Naphthalene). In containers of 240 gallons or less containing 172 gallons or less, this product is not regulated by DOT.

TSCA:

This product is listed on the TSCA Inventory as a UVBC (Unknown, variable composition or biological) Chemical at CAS Registry Number 64742-94-5

CERCLA:

If the reportable quantity of this product is accidentally spilled, the incident is subject to the provisions of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and must be reported to the National Response Center by calling 800-424-8802. The reportable spill quantity of this product is 1570 pounds. This product contains Polycyclic Organic Matter, Naphthalene.

SARA TITLE III:

Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories: Delayed Health. This information may be subject to the provisions of the Community Right-To-Know Reporting Requirements (40 CFR 370) if threshold quantity criteria are met. This product contains the following Section 313 Reportable Ingredients:

<u>Component</u>	<u>CAS Number</u>	<u>Maximum %</u>
Naphthalene	91-20-3	7.0%

SECTION X - SPILL OR LEAK PROCEDURES

STEPS FOR MATERIAL SPILLAGE:

Remove all sources of ignition (flame, hot surfaces and any producers of electrical, static, or frictional sparks). Wear appropriate protective clothing (See Section X). Ventilate area and try to contain spill by diking with sand or other absorbent material. Collect spill for disposal by scooping up liquids (if a large spill) and absorbing with sand or other approved absorbent materials and dispose of in accordance with local, state and federal regulations.

WASTE DISPOSAL METHODS:

Dispose of in accordance with local, state and federal regulations.

SECTION XI - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

OSHA/NIOSH approved self-contained breathing apparatus or vapor cartridge respirator. (Must be worn if PEL & TLV levels are exceeded).

VENTILATION:

Provide adequate cross air ventilation to keep dust and/or vapor levels below PEL & TLV values. (See Section V or respiratory area).

PROTECTIVE GLOVES:

Impervious gloves (rubber or neoprene) to avoid direct skin contact.

EYE PROTECTION:

Splash proof safety goggles.

OTHER PROTECTIVE EQUIPMENT:

Eyewash station, emergency shower.

SECTION XII - SPECIAL PRECAUTIONS

HANDLING AND SPECIAL PRECAUTIONS:

Overheating may cause container to rupture.

Use Explosion-proof electrical equipment.

Container must be kept closed and ventilation provided to prevent vapor concentration buildup.

Store in a cool dry place.

Do not breath vapor or get liquid in eyes or on skin or clothing.

Keep away from heat or sources of ignition.

OTHER PRECAUTIONS:

Check all containers for leaks. Wear protective clothing as in Section X. Avoid prolonged breathing of vapors or contact with skin. Ensure that all equipment is grounded to prevent static discharge. Containers of this material may be hazardous when emptied due to solid or vapor residue. All hazard precautions given in this data sheet must be observed for empty containers.