

BIOBOR JF®

Material Safety Data Sheet

Effective 1/1/2004

Emergency Telephone Number 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Information: Biobor JF®
Generic Description: Substituted Dioxaborinanes
Product Use: Biocide

TSCA NO.: n/a

Pesticide-exempt from TSCA
Inventory under TSCA § (2) (B) (ii)
CAS NO: 8063-89-6
EPA REG. NO. 652217-1

For customer service/technical information, contact:

Hammonds Fuel Additives, Inc.
15760 West Hardy, Suite 400
Houston TX 77060-3147
(800)548-9166

ChemTrec Emergency
(800)424-9300

HAZARD RATINGS

	HMIS	NFPA
Health	1	1
Fire	2	2
Reactivity	0	0

*=Chronic

2. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name	CAS#	Approximate % (w/w)
Substituted dioxaborinanes	See below*	95.0
Naphtha	8030-30-6	4.5
Non-hazardous and other ingredients below reportable levels		Balance

*2,2' - (1-methyltrimethylenedioxy) bis - (4-methyl-1, 3, 2-dioxaborinane);
2,2' - oxybis (4, 4, 6 - trimethyl-1, 3, 2-dioxaborinane) (CAS No.: 8063-89-6).

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: COMBUSTIBLE LIQUID AND VAPOR (FLAMMABLE IF SHIPPED BY AIR/VESSEL). INHALATION MAY CAUSE DIZZINESS, HEADACHE AND INCOORDINATION. INGESTION CAN CAUSE DIZZINESS, FAINTNESS, HEADACHE AND INCOORDINATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. MAY CAUSE DIGESTIVE TRACT IRRITATION. INGESTION MAY CAUSE NAUSEA, VOMITING, PAIN, UPSET STOMACH, DIARRHEA. INHALATION MAY CAUSE NAUSEA, VOMITING, UPSET STOMACH. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. See sections 3, 5, & 6.

PRIMARY ROUTE OF EXPOSURE: Eye. Skin. Inhalation (breathing).

EYE CONTACT: May cause slight to mild irritation. May cause corneal opacity (clouding of the eye surface). Can cause burning sensation, tearing, and redness.

SKIN CONTACT: May cause slight to mild irritation. Prolonged or repeated contact may dry the skin and lead to irritation (i.e. dermatitis).

INHALATION (Breathing): (Irritating to the eyes, nose and respiratory tract. Can cause dizziness, headaches, and incoordination. Nausea, vomiting and stomach upset can occur.

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6. ACCIDENTAL RELEASE MEASURES

EVACUATION: Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Eliminate all sources of ignition.

CONTAINMENT: Safely stop discharge. Contain material, as necessary, with a dike or barrier. Stop material from contaminating soil, or from entering sewers or bodies of water.

CLEAN-UP/PERSONAL PROTECTION EQUIPMENT: Appropriate safety measures and protective equipment should be used. Use supplied air respirator or self-contained breathing apparatus in enclosed spaces, or if airborne exposure limits can be exceeded. See Section 8.

COLLECTION AND DISPOSAL: Stop discharge, if safe to do so. Use proper protective equipment. Use non-sparking tools and/or explosion-proof equipment. Stop ignition sources. Cover spills with absorbent clay or sawdust and place in closed chemical waste containers. Dispose of according to applicable local, state and federal regulations.

REPORTING: Spills of this material in excess of a component's RQ must be reported to the National Response Center (800-424-8802) and to the appropriate state and local emergency response organizations.

7. HANDLING AND STORAGE

STORAGE CONDITIONS: Store in cool, dry, well ventilated area away from heat, ignition sources, and direct sunlight. Keep containers tightly closed. **WARNING:** Hot organic chemical vapors or mists can suddenly, and without warning, combust when mixed with air. Ignition can occur at typical elevated temperature process conditions. Any use in such processes should be evaluated thoroughly to assure safe operating conditions.

TRANSFER: Containers should be supported and grounded before opening, dispensing, mixing, pouring and emptying. Open with non-sparking tools. If container is warm, open bung slowly to release internal pressure.

PERSONAL HYGIENE: Wash thoroughly after handling, especially before eating, drinking, smoking and using restroom facilities. Wash contaminated goggles, faceshield and gloves. Professionally launder contaminated clothing before re-use.

EMPTY CONTAINER PRECAUTIONS: Attention! This container hazardous when empty. Follow label warnings even after container is emptied since empty containers may retain product residues. Do not use heat, sparks, open flames, torches, cigarettes on or near empty container. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption or where skin contact can occur.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ACGIH - TLV - No regulated ingredients.

OSHA - PEL
Naphtha

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ENGINEERING CONTROLS/VENTILATION: Local exhaust ventilation is recommended when vapors, mists or dusts can be released in excess of established airborne exposure limits (TLVs or PELs).

EYE PROTECTION: Wear chemical splash goggles. An eye wash facility should be readily available.

SKIN PROTECTION: Wear protective clothing and appropriate impervious gloves. Because a variety of protective gloves exist, consult glove manufacturer to determine the proper type for a specific operation.

RESPIRATORY PROTECTION: Avoid breathing vapor and/or mists. Wear NIOSH/MSHA-approved equipment. Determine the appropriate type of consulting the respirator manufacturer. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA)

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Yellow	Odor	: Aromatic
Physical State	: Liquid	Solubility	: Moderately soluble
pH	: Not Applicable	Boiling Point	: 529° F 276.1° C
Vapor Density	: > 1 Air = 1	Evaporation Rt.	: < 1 (n-Butyl alcohol)
VOC Material	: Not Determined	Specific Gravity:	1.05
%Non-Vol (w/w):	95		

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY:	Stable under normal conditions of use.
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS TO AVOID:	High temperatures.
INCOMPATIBILITY WITH OTHER MATERIALS:	Water. Oxidizers.

11. TOXICITY INFORMATION

COMPONENTS:

Substituted dioxaborinanes:

Eye, skin, and respiratory tract irritant.

Oral LD ₅₀	Rat	3.16 ml/Kg
Dermal LD ₅₀	Rabbit	9.1 ml/Kg

Naphtha:

Eye, skin, and respiratory tract irritant.

12. ECOLOGICAL INFORMATION

No data are available on this product.

13 DISPOSAL CONSIDERATIONS

DISPOSAL: When a decision is made to discard this material as supplied, it meets RCRA's characteristic definition of ignitability.

GENERAL STATEMENTS: Federal regulations may apply to empty container. State and/or local regulations may be different.

GENERAL RECOMMENDATIONS: Of the methods of disposal currently available, it is recommended that an alternative be selected according to the following order of preference, based upon environmental acceptability: (1) recycle or rework, if feasible; (2) incinerate at an authorized facility; or (3) treat at an acceptable waste treatment facility.

SPECIAL INSTRUCTIONS: Be sure to contact the appropriate government environmental agencies if further guidance is required.

14. TRANSPORT INFORMATION

	Flammable liquids, n.o.s. (petroleum naphtha)	49 CFR Y	IATA Y	IMO Y
DOT Label :	Flammable Liquid	UN/NA Id Num:	UN 1993	
DOT Label No. :	L152 (For Canadian Shipments F 154)			
Hazard Class :	3 (IATA/49 CFR) 3.3 (IMO)			
Packing Group :	III	WHMIS Label :	F 152	

15. REGULATORY INFORMATION

FEDERAL:

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

SARA Title III - Section 311/312 - Hazard Categories:

Y- Fire Hazard
N - Sudden Release of Pressure Hazard
N - Reactivity Hazard
Y - Immediate (acute) Health Hazard
N - Delayed (chronic) Health Hazard

Ozone-Depleting Chemicals - No regulated ingredients.

SARA Section 302 Extremely Hazardous Mat - No regulated ingredients.

SARA Section 313 Toxic Chemicals - No regulated ingredients.

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