

**Biobor®JF**

ACCORDING TO GHS

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 GHS Product Identifier**

Product Name	Biobor®JF
Trade Name	Biobor®JF
Synonyms	Substituted Dioxaborinanes

**1.2 Recommended use of the chemical and restrictions on use**

Identified Use(s)	Biocide additive for petroleum products.
Uses Advised Against	No Data Available

**1.3 Supplier's details**

Manufacturer	
Company Identification	Hammonds Fuel Additives, Inc.
Address of Manufacturer	6951 W Little York
Postal code	Houston, TX 77040
Telephone:	+1 800-548-9166
E-mail	sales@biobor.com
Office hours	Monday-Friday 8:00am-5:00pm EST

Supplier	
Company Identification	Hammonds Fuel Additives, Inc.
Address of Supplier	6951 W Little York
Postal code	Houston, TX 77040
Telephone:	+1 800-548-9166
E-mail	sales@biobor.com
Office hours	Monday-Friday 8:00am-5:00pm EST

**1.4 Emergency telephone number**

National Poisons Centre Phone	0800 765 766
National Poisons Centre Address	National Poisons Centre, Dunedin School of Medicine, University of Otago, PO Box 56, Dunedin 9054, New Zealand
Emergency Phone No	Within United States; Canada; Puerto Rico; US Virgin Islands: 1-800-255-3924 Outside North America: +1-813-248-0585 (Collect calls accepted)
Contact	ChemTel

**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture**

GHS Classification	Flam. Liq. 3 :Flammable liquid and vapour. Skin Irrit. 2 :Causes skin irritation. Eye Dam. 1 :Causes serious eye damage.
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**2.2 GHS label elements, including precautionary statements**

	GHS
Product Name	Biobor®JF

**Biobor® JF**

Hazard Pictogram(s)



GHS02



GHS05

Signal Word(s)

Danger

Hazard Statement(s)

H226: Flammable liquid and vapour.

H315: Causes skin irritation.

H318: Causes serious eye damage.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

P501: Dispose of contents in accordance with local, state or national legislation.

**2.3 Other hazards which do not result in classification**

None known.

**2.4 Additional Information**

For full text of H/P Statements see section 16.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**
**3.1 Substances**

HAZARDOUS INGREDIENT(S)	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
2,2'-[(1-methylpropane-1,3-diyl)bis(oxy)]bis[4-methyl-1,3,2-dioxaborinane]	2665-13-6	67.60	Not classified.	None
2,2'-oxybis[4,4,6-trimethyl-1,3,2-dioxaborinane]	14697-50-8	27.40	Not classified.	None
Low boiling point naphtha	64742-89-8	4.50	Flam. Liq. H226 Asp. Tox. 1 H304 Muta. 1B H340 Carc. 1B H350	GHS08
Non-hazardous and other ingredients below reportable levels		0.50	Not classified.	None

**3.2 Mixtures**

Not applicable.

**Biobor® JF****SECTION 4: FIRST AID MEASURES****4.1 Description of necessary first-aid measures**

Inhalation	Treat symptomatically.
Skin Contact	Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. Specific treatment (see Medical Advice on this label). Take off immediately all contaminated clothing. Rinse skin with water.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
Ingestion	Treat symptomatically.

**4.2 Most important symptoms/effects, acute and delayed**

Skin irritation and eye damage.

**4.3 Indication of immediate medical attention and special treatment needed, if necessary**

Specific treatment (see Medical Advice on this label). Immediately call a POISON CENTER/doctor. Treat symptomatically.

**SECTION 5: FIREFIGHTING MEASURES****5.1 Extinguishing media**

Suitable Extinguishing media	Use water spray, dry powder or carbon dioxide to extinguish.
Unsuitable extinguishing media	Water jet spray

**5.2 Special hazards arising from the chemical**

Flammable liquid and vapour. Combustion or thermal decomposition will evolve toxic and irritant vapours.

**5.3 Special protective actions for fire-fighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.

**SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Wear suitable protective clothing, gloves and eye/face protection.

**6.2 Environmental precautions**

This material and its container must be disposed of in a safe way.

**6.3 Methods and material for containment and cleaning up**

Adsorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Containers must not be punctured or destroyed by burning, even when empty.

**6.4 Reference to other sections**

See Also Section 8, 13.

**Biobor® JF****SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling**

Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting/equipment. Use non-sparking tools. Take action to prevent static discharges.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in a well-ventilated place. Keep cool.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

**7.3 Specific end use(s)**

Biocide additive for petroleum products.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters**

8.1.1 Occupational Exposure Limits No Occupational Exposure Limit assigned.

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Individual protection measures



Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).



Respiratory protection

Normally no personal respiratory protection is necessary. Handling of larger amounts A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards

None known.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

**Biobor® JF****SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Appearance	Liquid.
	Colour : Yellow
Odour	Aromatic
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Not known.
Initial boiling point and boiling range	Not known.
Flash Point	40.56 ° C
Evaporation rate	< 1 n-Butyl Acetate = 1
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	Not known.
Vapour density	> 1 Air=1
Density (g/ml)	Not known.
Relative density	1.05
Solubility(ies)	Solubility (Water) : Not known. Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (° C)	Not known.
Viscosity	CST@40° C = 21.31
Explosive properties	Not known.
Oxidising properties	Not known.

**9.2 Other information**

None.

**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

None anticipated.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose.

**10.4 Conditions to avoid**

Avoid friction, sparks, or other means of ignition.

**10.5 Incompatible materials**

Not known.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**Biobor® JF****SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects**

Acute toxicity - Ingestion	Not classified.
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/irritation	Causes serious eye damage.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	Not classified.
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.

**11.2 Other information**

Not known.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

Toxicity - Aquatic invertebrates	Low toxicity to invertebrates.
Toxicity - Fish	Low toxicity to fish.
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

**12.2 Persistence and degradability**

Not known.

**12.3 Bioaccumulative potential**

Not known.

**12.4 Mobility in soil**

Not known.

**12.5 Other adverse effects**

Not known.

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Disposal Method**

Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Do not allow to enter drains, sewers or watercourses. Do NOT landfill. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer or incinerator. Dispose at suitable refuse site.

**Biobor® JF****13.2 Additional Information****SECTION 14: TRANSPORT INFORMATION****14.1 UN number**

UN No. 1993

**14.2 UN proper shipping name**

UN proper shipping name FLAMMABLE LIQUID, N.O.S. (mixed dioxaborinanes, naphtha)

**14.3 Transport hazard class(es)**

ADR/RID

ADR/RID Class 3

ADR Classification Code F1

Special Provisions 274 601

Limited Quantities 5 L

Excepted Quantities E1

Emergency Action Code •3Y

Mixed Packing Instructions for Packages P001 IBC03 LP01 R001

Special Packing Provisions for Packages

Mixed Packing Instructions for Packages

Special Packing Provisions for Packages

Mixed Packing Instructions for Packages MP19

Special Packing Provisions for Packages

Packing Instructions for Portable Tanks T4

Special Provisions for Portable Tanks TP1 TP29

Tank Code for Tanks LGBF

Special Provisions for Tanks

Vehicle for Tank Carriage FL

ADR Transport Category 3

Tunnel Restriction Code D/E

Special Provisions for Carriage - Packages V12

Special Provisions for Carriage - Bulk

Special Provisions for Carriage - Bulk

Special Provisions for Carriage -

Loading, Unloading and Handling

Special Provisions for Carriage - S2

Operation

ADR HIN 30

IMDG

IMDG Class 3

Special Provisions 274 601

Limited Quantities 5 L

Excepted Quantities E1

Mixed Packing Instructions for Packages P001 IBC03 LP01 R001

Special Packing Provisions for Packages

Special Packing Provisions for Packages

Special Packing Provisions for Packages

Packing Instructions for Portable Tanks T4

**Biobor® JF**

Special Provisions for Portable Tanks	TP1 TP29
IMDG EMS	F-E, S-E
Stowage and Handling	Category A
Segregation	
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (mixed dioxaborinanes, naphtha)
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited	Y344
Quantities Packing Instructions	
Passenger and Cargo Aircraft Limited	10L
Quantities Max net Qty	
Passenger and Cargo Aircraft Packing	355
Instructions	
Passenger and Cargo Aircraft Max net Qty	60L
Cargo Aircraft Packing Instructions	366
Cargo Aircraft Max net Qty	220L
Special Provisions	A3
Emergency Response Guidebook (ERG)	3L
Code	
Labels	
Labels	3

**14.4 Packing Group, if applicable**

Packing group III

**14.5 Environmental hazards**

Environmental hazards Not classified as a Marine Pollutant.

**14.6 Special precautions for user**

Special precautions for user Not known.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

No information available

**SECTION 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations specific for the product in question**

OSPAR List of Chemicals for Priority Action	Not listed
NTP (National Toxicology Program)	Not listed
IARC (International Agency for Research on Cancer)	Not listed
NZIoC (New Zealand Inventory of Chemicals)	Listed
New Zealand EPA Group Standard	HSR002495



**Biobor® JF****SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements:

**LEGEND**

Hazard Pictogram(s)



GHS02



GHS05

GHS08: GHS: Health hazard

Hazard classification

Flam. Liq. 3 : Flammable liquid, Category 3

Asp. Tox. 1 : Aspiration hazard, Category 1

Skin Irrit. 2 : Skin corrosion/irritation, Category 2

Eye Dam. 1 : Serious eye damage/irritation, Category 1

Muta. 1B : Germ cell mutagenicity, Category 1B (64742-89-8)

Carc. 1B : Carcinogenicity, Category 1B (64742-89-8)

Hazard Statement(s)

H226: Flammable liquid and vapour.

H304: May be fatal if swallowed and enters airways.

H315: Causes skin irritation.

H318: Causes serious eye damage.

H340: May cause genetic defects. (64742-89-8)

H350: May cause cancer. (64742-89-8)

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/equipment.

P242: Use non-sparking tools.

P243: Take action to prevent static discharges.

P264: Wash hands and exposed skin thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352: IF ON SKIN: Wash with plenty of water.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

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P321: Specific treatment (see Medical Advice on this label).

P332+P313: If skin irritation occurs: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P370+P378: In case of fire: Use water spray, dry powder or carbon dioxide to extinguish.

P403+P235: Store in a well-ventilated place. Keep cool.

P501: Dispose of contents in accordance with local, state or national legislation.

## Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS : Chemical Abstracts Service

GHS : Globally Harmonised System of Classification and Labelling of Chemicals

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

PNEC : Predicted No Effect Concentration

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

## Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose. Hammonds Fuel Additives gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law. Hammonds Fuel Additives accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.