

**Biobor®JF**

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

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

Product Name	Biobor®JF
Trade Name	Biobor®JF
Synonyms	Substituted Dioxaborinanes
CAS No.	8063-89-6
Registration No.	No registration no. Offered under derogation pursuant to Article 55(1) of regulation (EU) No 528/2012

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified Use(s)	Biocide for professional use in hydrocarbon fuels – PT6.
Uses Advised Against	No Data Available

1.3 Details of the supplier of the safety data sheet

Manufacturer

Company Identification	Hammonds Fuel Additives, Inc.
Address of Manufacturer	6951 W Little York
Postal code	Houston, Texas 77040
Telephone:	+1 800-548-9166
Fax	Not known.
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, Texas 77040
Telephone:	+1 800-548-9166
Fax	Not known.
E-mail	sales@biobor.com
Office hours	Monday-Friday 8:00am-5:00pm EST

1.4 Emergency telephone number

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
Poison Information Centre Information	Children's Hospital P&A Kyriakou, Athens 11762, Greece
Emergency Phone No.	(0030) 2107793777

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

Regulation (EC) No. 1272/2008 (CLP)	Flam. Liq. 3 :Flammable liquid and vapour. Eye Dam. 1 :Causes serious eye damage. Repr. 1B :May damage fertility or the unborn child.
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Biobor®JF
2.2 Label elements

According to Regulation (EC) No. 1272/2008 (CLP)

Product Name

Biobor®JF

Hazard Pictogram(s)



GHS02



GHS05



GHS08

Signal Word(s)

Danger

Hazard Statement(s)

H226: Flammable liquid and vapour.

H318: Causes serious eye damage.

H360: May damage fertility or the unborn child.

Precautionary Statement(s)

P201: Obtain special instructions before use.

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.

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.

P308+P313: IF exposed or concerned: Get medical advice/attention.

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

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

2.3 Other hazards

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

INGREDIENT(S)	CAS No.	EC No. / REACH Registration 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	220-198-4	67.6	Flam. Liq. H226 Repr. 1B H360 Eye Dam. H318	GHS02 GHS05 GHS08
2,2'-oxybis[4,4,6-trimethyl-1,3,2-dioxaborinane]	14697-50-8	238-749-2	27.4	Flam. Liq. H226 Repr. 1B H360 Eye Dam. H318	GHS02 GHS05 GHS08
Low boiling point naphtha	64742-89-8	265-192-2	4.5	Flam. Liq. H226 Asp. Tox. 1 H304 The naphtha	GHS08

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				contains less than 0.1% benzene and therefore does not need to be classified as a carcinogen or a mutagen.	
Water - Non-hazardous and other ingredients below reportable levels			.5	Not classified.	None

3.2 Mixtures

Not applicable.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

Inhalation	IF exposed or concerned: Get medical advice/attention.
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. IF exposed or concerned: Seek medical advice/attention.
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	Rinse mouth. Immediately call a POISON CENTER/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Causes mild skin irritation and serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

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 substance or mixture

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

5.3 Advice for firefighters

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**

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Provide adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure full personal protection (including respiratory protection) during removal of spillages.

6.2 Environmental precautions

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

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.

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

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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 locked up. 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)

PT-6 Biocide for professional use in hydrocarbons.

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. Use with ventilation, local exhaust ventilation or breathing protection. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment



Eye Protection

Wear eye protection with side protection (EN166).

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Skin protection

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



Respiratory protection

A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards

None known.

8.2.3. Environmental Exposure Controls Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

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	276.11° C
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.

**Biobor®JF****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.

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 mild skin irritation.
Serious eye damage/irritation	Causes serious eye damage. Rabbit - Severe response - including persistent corneal opacity
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	In vitro bacterial mutation (Salmonella) – negative; In vitro gene mutation assay (mice) negative; In vitro UDS (rat) - negative; In vivo micronucleus (mice) – negative
Carcinogenicity	Not classified.
Reproductive toxicity	May damage fertility or the unborn child. Rat, no maternal toxicity, embryo/foetal toxicity with increased incidence of variations and malformations. Foetal NOEL = 100 mg/kg; Rabbit, no maternal toxicity, embryo/foetal toxicity with increased incidence of variations. Foetal NOEL = 25 mg/kg
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	48 h EC50 = 730 mg/ml; NOEC = 170 mg/ml (Daphnia Magna)
Toxicity - Fish	96 h LC50 = 79 mg/ml; NOEC = 15 mg/ml (Rainbow Trout)
Toxicity - Algae	No data
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	LC50 > 5620 ppm; no mortality or other observed effects (Northern Bob White)

**Biobor®JF****12.2 Persistence and degradability**

Not known.

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

Not known.

12.6 Other adverse effects

Not known.

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

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 of this material and its container to hazardous or special waste collection point. Dispose at suitable refuse site.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

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 MP19

Packing Instructions for Portable Tanks

Packing Instructions for Portable Tanks T4

Special Provisions for Portable Tanks TP1 TP29

Tank Code for Tanks LGBF

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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 - Loading, Unloading and Handling	
Special Provisions for Carriage - Operation	S2
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	
Packing Instructions for Portable Tanks	T4
Special Provisions for Portable Tanks	TP1 TP29
IMDG EMS	F-E, S-E
Stowage and Handling Segregation	Category A
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	FLAMMABLE LIQUID, N.O.S. (mixed dioxaborinanes, naphtha)
Excepted Quantities	E1
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y344
Passenger and Cargo Aircraft Limited Quantities Max net Qty	10L
Passenger and Cargo Aircraft Packing Instructions	355
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) Code	3L
Labels	
Labels	3

**Biobor®JF****14.4 Packing group**

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/legislation specific for the substance or mixture**

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed

High Concern for Authorisation

REACH: ANNEX XIV list of substances subject to authorisation Not listed

subject to authorisation

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Reproductive toxins: Repr1B – Borates: 2,2'-[(1-methylpropane-1,3-diyl)bis(oxy)]bis[4-methyl-1,3,2-dioxaborinane] (2665-13-6), 2,2'-oxybis[4,4,6-trimethyl-1,3,2-dioxaborinane] (14697-50-8)

Community Rolling Action Plan (CoRAP) Not listed

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants Not listed

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer Not listed

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals Not listed

National regulations

Other Not known.

15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Biobor®JF

Hazard Pictogram(s)



GHS02



GHS05



GHS08

Hazard classification

Flam. Liq. 3 : Flammable liquid, Category 3

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

Repr. 1B : Reproductive toxicity, Category 1B

Hazard Statement(s)

H226: Flammable liquid and vapour.

H318: Causes serious eye damage.

H360: May damage fertility or the unborn child.

Precautionary Statement(s)

P201: Obtain special instructions before use.

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

P232: Protect from moisture.

P233: Keep container tightly closed.

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

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

P308+P313: IF exposed or concerned: Get medical advice/attention.

P310: Immediately call a POISON CENTER/doctor.

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

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

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

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

vPvB : very Persistent and very Bioaccumulative

Key literature references and sources for data used to compile the SDS

Regulation (EC) No. 1272/2008 (CLP)

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