

**Biobor®JF**

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) &amp; 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<br>Outside North America: +1-813-248-0585 (Collect calls accepted) |
| Contact             | ChemTel   |

**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.<br>Eye Dam. 1 :Causes serious eye damage.<br>Repr. 1B :May damage fertility or the unborn child. |
|-------------------------------------|---|

**2.2 Label elements**

**Biobor®JF**

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<br>Repr. 1B H360<br>Eye Dam. H318                     | GHS02<br>GHS05<br>GHS08 |
| 2,2'-oxybis[4,4,6-trimethyl-1,3,2-dioxaborinane]                           | 14697-50-8 | 238-749-2                       | 27.4 | Flam. Liq. H226<br>Repr. 1B H360<br>Eye Dam. H318                     | GHS02<br>GHS05<br>GHS08 |
| Low boiling point naphtha  | 64742-89-8 | 265-192-2                       | 4.5  | Flam. Liq. H226<br>Asp. Tox. 1 H304<br>The naphtha contains less than | GHS08                   |

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|   |  |  |    |   |      |
|---|--|--|----|---|------|
|   |  |  |    | 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.<br>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.<br>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.<br>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.<br>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, reclaimor 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 P001 IBC03 LP01 R001

Packages

Special Packing Provisions for

Packages

Mixed Packing Instructions for MP19

Packages

Packing Instructions for Portable Tanks T4

Special Provisions for Portable Tanks TP1 TP29

Tank Code for Tanks LGBF

**Biobor®JF**

## Special Provisions for Tanks

|   |  |
|---|--|
| Vehicle for Tank Carriage   | FL   |
| ADR Transport Category  | 3  |
| Tunnel Restriction Code   | D/E  |
| Special Provisions for Carriage -<br>Packages                           | V12  |
| Special Provisions for Carriage - Bulk                                  |  |
| Special Provisions for Carriage -<br>Loading, Unloading and Handling    |  |
| Special Provisions for Carriage -<br>Operation                          | S2   |
| ADR HIN   | 30   |
| IMDG  |  |
| IMDG Class  | 3  |
| Special Provisions  | 274 601  |
| Limited Quantities  | 5 L  |
| Excepted Quantities   | E1   |
| Mixed Packing Instructions for<br>Packages                              | P001 IBC03 LP01 R001                                     |
| Special Packing Provisions for<br>Packages                              |  |
| Packing Instructions for Portable Tanks                                 | T4   |
| Special Provisions for Portable Tanks                                   | TP1 TP29   |
| IMDG EMS  | F-E, S-E   |
| Stowage and Handling<br>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<br>Quantities Packing Instructions | Y344   |
| Passenger and Cargo Aircraft Limited<br>Quantities Max net Qty          | 10L  |
| Passenger and Cargo Aircraft Packing<br>Instructions                    | 355  |
| Passenger and Cargo Aircraft Max net<br>Qty                             | 60L  |
| Cargo Aircraft Packing Instructions                                     | 366  |
| Cargo Aircraft Max net Qty  | 220L   |
| Special Provisions  | A3   |
| Emergency Response Guidebook (ERG)<br>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

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

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

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.

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants

Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

Regulation (EC) N° 850/2004 of the European Parliament and of the Council on persistent organic pollutants

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Regulation (EC) N° 1005/2009 on substances that deplete the ozone layer

Regulation (EU) N° 649/2012 of the European Parliament and of the Council concerning the export and import of hazardous chemicals

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

**Biobor®JF**

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)

Disclaimers

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