

ACCORDING TO WORK HEALTH AND SAFETY (WHS) REGULATIONS

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

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

Identified Use(s) Biocide additive for petroleum products.

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
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
E-mail sales@biobor.com

Office hours Monday-Friday 8:00am-5:00pm EST

1.4 Emergency telephone number

The Children's Hospital at Westmead

Locked Bag 4001 Westmead, NSW 2145

NSW Poisons Phone No. 13 11 26

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)

Within Australia 1-300-954-583

Contact ChemTel

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

In accordance to GHS as implemented Flam. Liq. 3 :Flammable liquid and vapour. under WHS Regulations Skin Irrit. 2 :Causes skin irritation.

Eye Dam. 1: Causes serious eye damage.

2.2 Label elements

In accordance to GHS as implemented under WHS Regulations

Product Name Biobor®JF



Hazard Pictogram(s)





Signal Word(s) Danger

Hazard Statement(s) H226: Flammable liquid and vapour.

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

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-	2665-13-6	67.60	Not classified.	None
methyl-1,3,2-dioxaborinane]				
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	GHS08
			Asp. Tox. 1 H304	
			Muta. 1B H340	
			Carc. 1B H350	
Water - Non-hazardous ingredients below reportable		0.50	Not classified.	None
levels				

3.2 Mixtures

Not applicable.



SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation Treat symptomatically.

Skin Contact 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 and effects, both acute and delayed

May cause skin irritation and eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

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

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.

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. Personal protection equipment



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.

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 $\,^{\circ}$ C

Evaporation rate < 1 n-Butyl Acetate = 1

Flammability (solid, gas) Not known. Upper/lower flammability or explosive Not known.

limits

 $\begin{array}{lll} \mbox{Vapour pressure} & \mbox{Not known.} \\ \mbox{Vapour density} & > 1 \mbox{ Air}{=}1 \\ \mbox{Density (g/ml)} & \mbox{Not known.} \\ \mbox{Relative density} & 1.05 \end{array}$

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 $CST@40^{\circ} C = 21.31$

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.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion

Acute toxicity - Skin Contact

Acute toxicity - Inhalation

Serious eye damage/irritation

Low acute toxicity

Low acute toxicity

Causes skin irritation.

Causes serious eye damage.

Skin sensitization data Not classified



Germ cell mutagenicity There is no evidence of mutagenic potential.

Carcinogenicity No evidence of carcinogenicity.

Reproductive toxicity

Lactation

STOT - single exposure

STOT - repeated exposure

Aspiration hazard

Not classified

Not classified

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 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 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

Special Provisions for Tanks

Vehicle for Tank Carriage FL
ADR Transport Category 3
Tunnel Restriction Code D/E
Special Provisions for Carriage - V12

Packages

Special Provisions for Carriage - Bulk Special Provisions for Carriage -

Loading, Unloading and Handling Special Provisions for Carriage -

Operation

ADR HIN 30

IMDG

IMDG Class3Special Provisions274 601Limited Quantities5 LExcepted QuantitiesE1

Mixed Packing Instructions for P001 IBC03 LP01 R001

S2

Packages

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 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 60L

Qty

Cargo Aircraft Packing Instructions 366
Cargo Aircraft Max net Qty 220L
Special Provisions A3
Emergency Response Guidebook (ERG) 3L

Code Labels

Labels



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

Australian Inventory of Industrial Listed

Chemicals

IMAP (Inventory Multi-Tiered 64742-89-8

Assessment and Prioritisation) - Stage

One chemicals

List of PECs (Priority Existing Not listed

Chemicals)

NPI (National Pollutant Inventory) Not listed Schedule 10 of WHS Regulations – Not listed

Prohibited carcinogens, restricted carcinogens and restricted hazardous

chemicals

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND



Hazard Pictogram(s)

Acronyms





GHS08: GHS: Health hazard

Hazard classification Flam. Liq. 3 : Flammable liquid, Category 3

Asp. Tox. 1: Aspiration hazard, Category 1

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.

H318: Causes serious eye damage.

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

H350: May cause cancer. (64743-89-8)

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.

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.

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.

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

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

IATA: International Air Transport Association



IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization
IMDG : International Maritime Dangerous Goods

LTEL: Long term exposure limit

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, Inc. 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, Inc. 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.