

**LubriBOR®**

ACCORDING TO GHS

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

Product Name LubriBOR®
Synonyms Nalco 5403

1.2 Recommended use of the chemical and restrictions on use

Identified Use(s) Corrosion inhibitor
Uses Advised Against Refer to available product literature or ask your local Sales Representative for restrictions on use and dose limits.

1.3 Supplier's details

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

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

GHS Classification Flam. Liq. 4 :Combustible liquid
Acute Tox. 5 :May be harmful if swallowed.
Asp. Tox. 1 :May be fatal if swallowed and enters airways.
Carc. 2 :Suspected of causing cancer.

2.2 GHS label elements, including precautionary statements

GHS
Product Name LubriBOR®

Hazard Pictogram(s)



GHS08

Signal Word(s) Danger

Hazard Statement(s) H227: Combustible liquid
H303: May be harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H351: Suspected of causing cancer.

Precautionary Statement(s) P102: Keep out of reach of children.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243: Take action to prevent static discharges.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash hands and exposed skin thoroughly after handling.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE/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.

**Lubribor®****2.4 Additional Information**

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

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

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Heavy Aromatic Naphtha	64742-94-5	30-60	Flam. Liq. 4 H227 Asp. Tox. 1 H304 Skin Irrit. 2 H315 STOT SE 3 H336 Aquatic Acute 2 H401 Aquatic Chronic 2 H411	GHS08 GHS07 GHS09
naphthalene	91-20-3	1-5	Not classified.	None
1,2,4-trimethylbenzene	95-63-6	1-5	Not classified.	None

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

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

Inhalation Treat symptomatically.
Skin Contact Treat symptomatically.
Eye Contact Treat symptomatically.
Ingestion Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.

4.2 Most important symptoms/effects, acute and delayed

Treat symptomatically.

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

IF exposed or concerned: Get medical advice/attention. 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 None.

5.2 Special hazards arising from the chemical

May decompose in a fire giving off toxic fumes.

5.3 Special protective actions for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

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

Provide adequate ventilation. 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**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear protective gloves/protective clothing/eye protection/face protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Store locked up. Keep out of reach of children.

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Storage temperature
Storage life
Incompatible materials

Ambient.
Stable under normal conditions.
None known.

7.3 Specific end use(s)

Corrosion inhibitor

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****8.1.1 Occupational Exposure Limits**

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Naphthalene	91-20-3	10	52			ACGIH TLV, Skin, A3
Naphthalene	91-20-3	0.1				OSHA PEL
Naphthalene	91-20-3	10	50	15	75	NIOSH REL Z-1
Naphthalene	91-20-3	10	50			OSHA PEL Z-1
1,2,4-Trimethyl benzene	95-63-6	10	49			ACGIH TLV, A4
Trimethyl benzene, isomers	95-63-6	25	125			NIOSH REL Z-1

Remark	Notes
ACGIH TLV	The American Conference of Governmental Industrial Hygienists (ACGIH®) Threshold Limit Values (TLVs®), 2022
Skin	Danger of cutaneous absorption
A3	Confirmed Animal Carcinogen with Unknown Relevance to Humans
OSHA PEL	Occupational Safety and Health (Cal/OSHA) Permissible Exposure Limits (PELs), 2019
NIOSH REL Z-1	National Institute for Occupational Safety and Health (NIOSH) Recommended Exposure Limits (RELs) from the NIOSH Pocket Guide to Chemical Hazards table Z-1: Up to 10-hour time weighted average (TWA) during a 40-hour work week, 2022
OSHA PEL Z-1	Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) from 29 CFR 1910.1000 Z-1 Table, 2022
A4	Not Classifiable as a Human Carcinogen

Biological Exposure Indices						
Substances	CAS Number	Sampling	Tissues	Control parameters	Biological monitoring guidance value	Comments
Naphthalene	91-20-3	End of shift	-	1-Naphthol + 2-Naphthol		*, Nq, Ns

Remark	Notes
*	with hydrolysis
Nq	Nonquantitative
Ns	Nonspecific

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.

8.2.2. Individual protection measures, such as personal protective equipment



Eye Protection

Wear eye protection with side protection (EN166).



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.

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

Appearance	Liquid.
	Colour : Dark Amber
Odour	Hydrocarbon Like
Odour threshold	Not known.
pH	Not known.
Melting point/freezing point	Pour Point:<-45.6°C
Initial boiling point and boiling range	Not known.
Flash Point	66 °C 66°C ASTM D 93, Pensky-Martens closed cup
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapour pressure	1.0 mm Hg (23.9°C) 1.6 mm Hg (37.8°C) 3.6 mm Hg (51.7°C)
Vapour density	Not known.
Density (g/ml)	7.6 - 7.8 lb/gal
Relative density	Not known.
Solubility(ies)	Solubility (Water) : Insoluble Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (°C)	Not known.
Viscosity	Kinematic: 20-40 mm ² /s (37.8°C); 15-35 mm ² /s (40°C)
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	Self classification: May be harmful if swallowed.
Acute toxicity - Skin Contact	Self classification: Not classified.
Acute toxicity - Inhalation	Self classification: Not classified.
Skin corrosion/irritation	Calculation method : Not classified.
Serious eye damage/irritation	Calculation method : Not classified.
Skin sensitization data	Calculation method : Not classified.
Respiratory sensitization data	Calculation method : Not classified.
Germ cell mutagenicity	Calculation method : Not classified.
Carcinogenicity	Self classification: Suspected of causing cancer.
Reproductive toxicity	Calculation method : Not classified.
Lactation	Calculation method : Not classified.
STOT - single exposure	Calculation method : Not classified.
STOT - repeated exposure	Calculation method : Not classified.
Aspiration hazard	Self classification: May be fatal if swallowed and enters airways.

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.

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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. 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

Not classified as hazardous for transport.

14.1 UN number	Not applicable
14.2 UN proper shipping name	Not applicable
14.3 Transport hazard class(es)	Not applicable
14.4 Packing Group, if applicable	Not applicable
14.5 Environmental hazards	Not classified as a Marine Pollutant.
14.6 Special precautions for user	Not known
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not known

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)	Listed : 91-20-3
IARC (International Agency for Research on Cancer)	Listed : 91-20-3

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS08

GHS07: GHS: Exclamation mark
GHS09: GHS: Environment

Hazard classification

Flam. Liq. 4 : Flammable liquid, Category 4
Acute Tox. 5 : Acute toxicity, Category 5

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Asp. Tox. 1 : Aspiration hazard, Category 1
Skin Irrit. 2 : Skin corrosion/irritation, Category 2
STOT SE 3 : Specific target organ toxicity — single exposure, Category 3
Carc. 2 : Carcinogenicity, Category 2
Aquatic Acute 2 : Hazardous to the aquatic environment, Acute, Category 2
Aquatic Chronic 2 : Hazardous to the aquatic environment, Chronic, Category 2

Hazard Statement(s)

H227: Combustible liquid
H303: May be harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H336: May cause drowsiness or dizziness.
H351: Suspected of causing cancer.
H401: Toxic to aquatic life.
H411: Toxic to aquatic life with long lasting effects.

Precautionary Statement(s)

P102: Keep out of reach of children.
P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243: Take action to prevent static discharges.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash hands and exposed skin thoroughly after handling.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310: IF SWALLOWED: Immediately call a POISON CENTRE/doctor.
P301+P312: IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P308+P313: IF exposed or concerned: Get medical advice/attention.
P331: Do NOT induce vomiting.
P370+P378: In case of fire: Use water spray, dry powder or carbon dioxide to extinguish.
P403: Store in a well-ventilated place.
P405: Store locked up.
P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ATE : Acute Toxicity Estimate
CAS : Chemical Abstracts Service
GHS : Globally Harmonised System of Classification and Labelling of Chemicals
LTEL : Long term exposure limit
PNEC : Predicted No Effect Concentration
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity

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

Disclaimers

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