

**HUM-Bug DETECTOR® Kit**

ACCORDING TO GHS

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

Product Name HUM-Bug DETECTOR® Kit
Trade Name HUM-Bug DETECTOR® Kit

1.2 Recommended use of the chemical and restrictions on use

Identified Use(s) Detection of micro-organism contamination in hydrocarbon fuels and oils.

1.3 Supplier's details

Manufacturer
Company Identification Hammonds Fuel Additives, Inc.
Address of Manufacturer 6951 W Little York
Zip 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

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 Skin Irrit. 2 :Causes skin irritation.
Eye Irrit. 2 :Causes serious eye irritation.

2.2 GHS label elements, including precautionary statements

GHS
Product Name HUM-Bug DETECTOR® Kit

Hazard Pictogram(s)



GHS07

Signal Word(s) Warning

Hazard Statement(s) H315: Causes skin irritation.
H319: Causes serious eye irritation.

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

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

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

P337+P313: If eye irritation persists: Get medical advice/attention.

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

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**

Not applicable.

3.2 Mixtures

HAZARDOUS INGREDIENT(S)	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Water	7732-18-5	54.20	Not classified	None
White mineral oil (petroleum)	8042-47-5	37.80	Aquatic Chronic 4 H413	None
Glycerine	56-81-5	2.00	Not classified	None
sodium hydroxide caustic soda	1310-73-2	0.50	Met. Corr. 1 H290 Skin Corr. 1A H314	GHS05
dipotassium hydrogenorthophosphate	7758-11-4	0.50	Not classified	None
potassium dihydrogenorthophosphate	7778-77-0	0.50	Not classified	None
Molybdate (MoO ₄ ²⁻), sodium, hydrate (1:2:2), (T-4)-	10102-40-6	0.50	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335	GHS07
Manganese chloride (MnCl ₂), tetrahydrate	13446-34-9	0.50	Acute Tox. 4 H302 Eye Dam. 1 H318 STOT RE 2 H373 Aquatic Chronic 2 H411	GHS05 GHS08 GHS07 GHS09
Sulfuric acid, magnesium salt, hydrate (1:1:7)	10034-99-8	0.50	Not classified	None

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sodium lactate	72-17-3	0.50	Eye Irrit. 2B H320	None
Iron chloride (FeCl ₃), hexahydrate	10025-77-1	0.50	Met. Corr. 1 H290 Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Dam. 1 H318 Aquatic Chronic 2 H411	GHS05 GHS07 GHS09
sodium hydrogencarbonate	144-55-8	0.50	Not classified	None
Calcium chloride (CaCl ₂), dihydrate	10035-04-8	0.50	Acute Tox. 4 H302 Eye Irrit. 2 H319	GHS07
ammonium nitrate	6484-52-2	0.50	Ox. Sol. 3 H272 Eye Irrit. 2B H320	GHS03
2,3,5-triphenyltetrazolium chloride	298-96-4	<0.5	Skin Irrit. 2 H315 Eye Irrit. 2 H319 STOT SE 3 H335	GHS07

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	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).
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion	Treat symptomatically.

4.2 Most important symptoms/effects, acute and delayed

May cause irritation.

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

Specific treatment (see Medical Advice on this label). Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES**5.1 Extinguishing Media**

Suitable Extinguishing Media	As appropriate for surrounding fire.
Unsuitable Extinguishing Media	None.

5.2 Special hazards arising from the chemical

May decompose in a fire, giving off toxic and irritant vapors.

5.3 Special protective actions for fire-fighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Dike fire control water for later disposal.

**HUM-Bug DETECTOR® Kit****SECTION 6: ACCIDENTAL RELEASE MEASURES****6.1 Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Wear suitable protective clothing, gloves and eye/face protection.

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. Contain spillages with sand, earth or any suitable adsorbent material. Earth may be shoveled to contain spillage and to avoid contamination of sewers and watercourses.

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.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature Ambient.
Storage life Stable under normal conditions.
Incompatible materials None known.

7.3 Specific end use(s)

Missing Phrase

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:
Mineral oil, Pure, highly and severely refined, excluding Metal working fluids	8042-47-5		5			ACGIH TLV, I, A4
Sodium hydroxide	1310-73-2				2	ACGIH TLV, STEL = C
Molybdenum and soluble compounds, as Mo	10102-40-6		0.5			ACGIH TLV, R, A3
Manganese, elemental and inorganic compounds, as Mn	13446-34-9		0.02			ACGIH TLV, R, A4
Manganese, elemental and inorganic compounds, as Mn	13446-34-9		0.02			ACGIH TLV, R, A4
Manganese, elemental and inorganic compounds, as Mn	13446-34-9		0.1			ACGIH TLV, I
Manganese, elemental and inorganic compounds, as Mn	13446-34-9		0.1			ACGIH TLV, I

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Remark	Notes
ACGIH TLV	The American Conference of Governmental Industrial Hygienists (ACGIH®) Threshold Limit Values (TLVs®) 2020
I	Inhalable particulate matter
A4	Not Classifiable as a Human Carcinogen
STEL = C	Ceiling limit
R	Respirable particulate matter
A3	Confirmed Animal Carcinogen with Unknown Relevance to Humans

8.2 Exposure controls

8.2.1. Appropriate engineering controls Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

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 Normally no personal respiratory protection is necessary.



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. Color : Two colorless layers
Odor	Slight hydrocarbon odor
Odor Threshold	Not known.
pH	Aqueous phase: 6.8-7.0
Melting Point/Freezing Point	-9 C (15.8 F) Hydrocarbon Mixture
Initial boiling point and boiling range	230 C (446 F) Hydrocarbon Mixture
Flash Point	Not known.
Evaporation Rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Not known.
Vapor pressure	Not known.
Vapor density	Not known.
Density (g/ml)	Hydrocarbon phase: 0.84@15° C
Relative density	Not known.

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Solubility(ies)	Solubility (Water) : Solubility (Water): Hydrocarbon phase insoluble in water; aqueous phase 100% soluble in water Solubility (Other) : Not known.
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	Not known.
Decomposition Temperature (° C)	Not known.
Viscosity	12.40 cST@40° C
Explosive properties	Not known.
Oxidizing 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

None anticipated.

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. Calculated acute toxicity estimate (ATE) Calc ATE - 33333.33000
Acute toxicity - Skin Contact	Not classified.
Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Calculation method : Causes skin irritation.
Serious eye damage/irritation	Calculation method : Causes serious eye irritation.
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
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.

**HUM-Bug DETECTOR® Kit****SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity**

May cause long lasting harmful effects to aquatic life.

Toxicity - Aquatic invertebrates	Not known.
Toxicity - Fish	Not known.
Toxicity - Algae	Not known.
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. 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

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

**HUM-Bug DETECTOR® Kit****15.1 Safety, health and environmental regulations specific for the product in question**

OSPAR List of Chemicals for Priority Not listed

Action

NTP (National Toxicology Program) Not listed

IARC (International Agency for Research Not listed

on Cancer)

TSCA

Complaint and listed active except CAS# 10025-77-1,10035-04-8,10034-99-8,13446-34-9 and 10102-40-6 which are hydrates (exempt from listing) and considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS07

GHS03: GHS: Flame over circle

GHS05: GHS: Corrosion

GHS08: GHS: Health hazard

GHS09: GHS: Environment

Hazard classification

Ox. Sol. 3 : Oxidizing solid, Category 3

Met. Corr. 1 : Substance or mixture corrosive to metals, Category 1

Acute Tox. 4 : Acute toxicity, Category 4

Skin Corr. 1A : Skin corrosion/irritation, Category 1A

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

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

Eye Irrit. 2 : Serious eye damage/irritation, Category 2

Eye Irrit. 2B : Serious eye damage/irritation, Category 2B

STOT SE 3 : Specific target organ toxicity — single exposure, Category 3

STOT RE 2 : Specific target organ toxicity — repeated exposure, Category 2

Aquatic Chronic 2 : Hazardous to the aquatic environment, Chronic, Category 2

Aquatic Chronic 4 : Hazardous to the aquatic environment, Chronic, Category 4

Hazard Statement(s)

H272: May intensify fire; oxidizer.

H290: May be corrosive to metals.

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H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H320: Causes eye irritation.
H335: May cause respiratory irritation.
H373: May cause damage to organs through prolonged or repeated exposure.
H411: Toxic to aquatic life with long lasting effects.
H413: May cause long lasting harmful effects to aquatic life.

Precautionary Statement(s)

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.
P302+P352: IF ON SKIN: Wash with plenty of 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.
P321: Specific treatment (see Medical Advice on this label).
P332+P313: If skin irritation occurs: Get medical advice/attention.
P337+P313: If eye irritation persists: Get medical advice/attention.
P362+P364: Take off contaminated clothing and wash it before reuse.
P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

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

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

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