

SAFETY DATA SHEET

According to the (US) Hazard Communication Standard (29 CFR 1910.1200)

	Date of issue: 06/15/2015	Version1.
SECTION 1. Identification		
Product identifier		
Catalog No.	FQS-047	
Product name	Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE®	
	HY-LITE PLUS ATP-BUFFER	
Relevant identified uses of t	he substance or mixture and uses advised against	
Identified uses	Reagent for analysis	
Details of the supplier of the	safety data sheet	
Company	Fuel Quality Services, Inc PO Box 1380, Flowery Branch, GA 30542 United States of America General Inquiries: +01-770-967-9790 Monday to Friday, 8:30 AM to 5:30 PM Eastern Time (GMT-5)	3
	E-mail: sales@fqsinc.com	
Emergency telephone	1-800-663-8253 PERS (USA) +01-801-629-0667 PERS (International)	
	24 Hours/day; 7 Days/week	
	Customer ID: 9405	
SECTION 2. Hazards identific	ation	
GHS-Labeling		
Not a dangerous substan	ce according to GHS.	
Other hazards		
None known.		
SECTION 3. Composition/info	rmation on ingredients	
Chemical nature	Aqueous solution	
SECTION 4. First aid measure	es	
Description of first-aid meas Inhalation	sures	
After inhalation: fresh air.	Consult doctor if feeling unwell.	
Skin contact		
In case of skin contact: T	ake off immediately all contaminated clothing. Rinse skin with water/	

Product number Product name	FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test
	Method) Fuel Test Kit HY-LiTE®
	HY-LITE PLUS ATP-BUFFER

Eye contact

After eye contact: rinse out with plenty of water.

Ingestion

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Most important symptoms and effects, both acute and delayed

Allergic reactions

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapors.

Advice for firefighters

Special protective equipment for fire-fighters Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Product number	FQS-047 Version1.0	0
Product name	Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test	
	Method) Fuel Test Kit HY-LiTE®	
	HY-LITE PLUS ATP-BUFFER	

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed.

Store at $+2^{\circ}C$ to $+8^{\circ}C$ ($+36^{\circ}F$ to $+46^{\circ}F$).

The data applies to the entire pack.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Application of skin- protective barrier cream recommended. Wash hands after working with substance.

Eye/face protection Safety glasses *Hand protection* Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Other protective equipment:

protective clothing

Respiratory protection

required when vapors/aerosols are generated.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9. Physical and chemical properties

Physical state

Product number Product name	FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® HY-LITE PLUS ATP-BUFFER
Color	No information available.
Odor	No strong odor known.
Odor Threshold	No information available.
рН	No information available.
Melting point	No information available.
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	ca.1.004 g/cm³ at 68 °F (20 °C)
Relative density	No information available.
Water solubility	at 68 °F (20 °C) soluble
Partition coefficient: n- octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LITE® HY-LITE PLUS ATP-BUFFER

SECTION 10. Stability and reactivity

Reactivity

See below

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) . *Stabilizer*

mixture of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-

3-one [EC no. 220-239-6] (3:1)

Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

Conditions to avoid

no information available

Incompatible materials

no information available

Hazardous decomposition products

no information available

SECTION 11. Toxicological information

Information on toxicological effects

Likely route of exposure Eye contact, Skin contact Sensitization Mixture may produce an allergic reaction. Specific target organ systemic toxicity - single exposure The substance or mixture is not classified as specific target organ toxicant, single exposure. Specific target organ systemic toxicity - repeated exposure The substance or mixture is not classified as specific target organ toxicant, repeated exposure. Aspiration hazard Regarding the available data the classification criteria are not fulfilled. Carcinogenicity IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. **OSHA** No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential

Product number Product name	FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® HY-LITE PLUS ATP-BUFFER
	carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or
	equal to 0.1% is identified as a known or anticipated carcinogen
	by NTP.
ACGIH	No ingredient of this product present at levels greater than or
	equal to 0.1% is identified as a carcinogen or potential
	carcinogen by ACGIH.

Further information

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Ingredients

SECTION 12. Ecological information

Ecotoxicity

No information available.

- Persistence and degradability No information available.
- Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Ingredients

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Product number Product name	FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® HY-LITE PLUS ATP-BUFFER
Sea transport (IMDG)	Not classified as dangerous in the meaning of transport regulations.
	Not classified as dangerous in the meaning of transport regulations.
THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!	

SECTION 15. Regulatory information

United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Ingredients

Ethylenediaminetetraacetic acid

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Ingredients

Ethylenediaminetetraacetic acid

DEA List I Not listed

DEA List II Not listed

US State Regulations

Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Product number Product name	FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LITE® HY-LITE PLUS ATP-BUFFER
Notification status	
TSCA:	Not Listed on TSCA inventory. For Research and Development Use only. Not For Manufacturing or Commercial Purposes.
DSL:	This product contains one or several components that are not on the Canadian DSL nor NDSL.

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Key or legend to abbreviations and acronyms used in the safety data sheet Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Date of issue: 06/15/2015

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

	Date of issue: 06/15/2015	Version1.
ECTION 1.Identification		
Product identifier		
Catalog No.	FQS-047	
Product name	Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE®	
	Extracting agent	
Relevant identified uses of the	e substance or mixture and uses advised against	
Identified uses	Reagent for analysis	
Details of the supplier of the s	safety data sheet	
Company	Fuel Quality Services, Inc PO Box 1380, Flowery Branch, GA 30542 United States of America General Inquiries: +01-770-967-9790 Monday to Friday, 8:30 AM to 5:30 PM Eastern Time (GMT-5)	,
Emergency telephone	1- 800-663-8253 PERS (USA) +01-801-629-0667 PERS (International)	
	24 Hours/day; 7 Days/week	
	Customer ID: 9405	
ECTION 2. Hazards identifica	tion	
GHS-Labeling		
Not a dangerous substanc	e according to GHS.	
Other hazards		
None known.		
ECTION 3. Composition/infor	mation on ingredients	
Chemical nature	Aqueous solution	
Hazardous ingredients Chemical Name (Concentr CAS-No. dodecyltrimethylammonit 1119-94-4	ration) um bromide (>= 1 % - < 5 %)	
	ng withheld as a trade secret.	

FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® Extracting agent

SECTION 4. First aid measures

Description of first-aid measures

Inhalation

After inhalation: fresh air.

Skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

Eye contact

After eye contact: rinse out with plenty of water.

Ingestion

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

Most important symptoms and effects, both acute and delayed

We have no description of any toxic symptoms.

Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Special hazards arising from the substance or mixture

Not combustible. Ambient fire may liberate hazardous vapors.

Advice for firefighters

Special protective equipment for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Product number	FQS-047 Version1.0
Product name	Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test
	Method) Fuel Test Kit HY-LiTE®
	Extracting agent

Protective equipment see section 8.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

SECTION 7. Handling and storage

Precautions for safe handling

Observe label precautions.

Conditions for safe storage, including any incompatibilities

Tightly closed.

Store at $+2^{\circ}$ C to $+8^{\circ}$ C ($+36^{\circ}$ F to $+46^{\circ}$ F).

The data applies to the entire pack.

SECTION 8. Exposure controls/personal protection

Exposure limit(s)

Contains no substances with occupational exposure limit values.

Engineering measures

Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

Hygiene measures

Change contaminated clothing. Wash hands after working with substance.

Eye/face protection Safety glasses *Hand protection* Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Respiratory protection

Not required; except in case of aerosol formation.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® Extracting agent

SECTION 9. Physical and chemical properties

Physical state	liquid
Color	No information available.
Odor	No strong odor known.
Odor Threshold	No information available.
рН	No information available.
Melting point	No information available.
Boiling point	No information available.
Flash point	Not applicable
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	1.004 g/cm³ at 68 °F (20 °C)
Relative density	No information available.
Water solubility	at 68 °F (20 °C) soluble
Partition coefficient: n- octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.

Product number Product name	FQS-047 Version1. Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® Extracting agent
Oxidizing properties	none
SECTION 10. Stability and rea	activity
Reactivity See below	
Chemical stability	
	stable under standard ambient conditions (room temperature).
Possibility of hazardous read Violent reactions possible	
The generally known read	ction partners of water.
Conditions to avoid	
no information available	
Incompatible materials	
no information available	
Hazardous decomposition p no information available	roducis
SECTION 11. Toxicological in	formation
Information on toxicological	effects
Likely route of exposure	
Eye contact, Skin contact Acute oral toxicity	
Acute toxicity estimate: > Calculation method	• 2,000 mg/kg
Specifictargetorgansys	temic toxicity - single exposure
	e is not classified as specific target organ toxicant, single exposure.
The substance or mixture	<i>temic toxicity - repeated exposure</i> is not classified as specific target organ toxicant, repeated exposure.
Aspiration hazard	data the classification criteria are not fulfilled.
Carcinogenicity	
IARC	No ingredient of this product present at levels greater than or
	equal to 0.1% is identified as probable, possible or confirmed
	human carcinogen by IAPC

human carcinogen by IARC.

OSHA No ingredient of this product present at levels greater than or

Product number Product name	FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® Extracting agent
	equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or
	equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or
	equal to 0.1% is identified as a carcinogen or potential
	carcinogen by ACGIH.

Further information

Hazardous properties cannot be excluded, but are relatively improbable due to the low concentration of the dissolved substance(s). Handle in accordance with good industrial hygiene and safety practice.

Ingredients

dodecyltrimethylammonium bromide Acute oral toxicity LD50 Rat: 200 - 1,000 mg/kg (External MSDS)

SECTION 12. Ecological information

Ecotoxicity

No information available.

Persistence and degradability

No information available.

Bioaccumulative potential

No information available.

Mobility in soil

No information available.

Ingredients

dodecyltrimethylammonium bromide No information available.

 Product number
 FQS-047
 Version1.0

 Product name
 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test

 Method) Fuel Test Kit HY-LiTE®
 Extracting agent

SECTION 13. Disposal considerations

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

SECTION 14. Transport information

Land transport (DOT)

Not classified as dangerous in the meaning of transport regulations.

Air transport (IATA)

Not classified as dangerous in the meaning of transport regulations.

Sea transport (IMDG)

Not classified as dangerous in the meaning of transport regulations.

THIS TRANSPORT DATA APPLIES TO THE ENTIRE PACK!

SECTION 15. Regulatory information United States of America

SARA 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Product number	FQS-047 Version1.0
Product name	Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test
	Method) Fuel Test Kit HY-LiTE®
	Extracting agent

SARA 302

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311,

Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311,

Table 117.3.

DEA List I Not listed

DEA List II Not listed

US State Regulations

Massachusetts Right To Know

Remarks

No components are subject to the Massachusetts Right to Know Act.

California Prop 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

Notification status

TSCA:	All components of the product are listed in the TSCA-inventory.
DSL:	This product contains one or several components listed in the Canadian NDSL.

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labeling

Hazard Statements

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements Prevention P273 Avoid release to the environment.

Key or legend to abbreviations and acronyms used in the safety data sheet

FQS-047 Version1.0 Rapid Microbial Test for Fuel Systems (Complies with ASTM D7463 ATP Test Method) Fuel Test Kit HY-LiTE® Extracting agent

Used abbreviations and acronyms can be looked up at www.wikipedia.org.

Date of issue: 06/15/2015

The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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