

Page 1 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

PRODUCT AND COMPANY INFORMATION

Product Name: Gulf Select Complete Induction Combustion Chamber Cleaner

Revision Date: 12/28/2015 SDS Number: GS252

<u>Common Name:</u> Intake and combustion chamber cleaner

CAS Number:BlendProduct Code:GS252Synonyms:N/A

Company Identification:

Supplier:

NU-TIER BRANDS, INC. 8282 S. Memorial Drive, Suite 302 Tulsa, OK 74133 www.gulflubricants.net

Under license from Gulf Oil LP

For Product Information: 1-800-566-4853

For Emergencies: 1-800-424-9300 (CHEMTREC)

HAZARDS IDENTIFICATION



Signal Word:

DANGER

Hazard Classes/Categories:

Flammable liquid, Category 3. Acute toxicity, Inhalation category 4. Germ cell mutagen, Category 1B. Carcinogen, Category 1B.



Page 2 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

Specific target organ toxicity – repeated exposure, Category 1. Aspiration hazard, Category 1.

Hazard Statement(s):

H226: Flammable liquid and vapor.

H332: Harmful if inhaled.

H340: May cause genetic defects.

H350: May cause cancer.

H372 Causes damage to the central nervous system through

prolonged or repeated exposure.

H304: May be fatal if swallowed and enters airways.

Precaution Statement(s):

P101: If medical advice is needed, have product container or label at

hand.

P102: Keep out of reach of children.

P103: Read label before use.

P201: Obtain special instructions before use.

P260: Do not breathe dust/fumes/gas/mist/vapors/spray.

P210: Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking.

P264: Wash thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

P233: Keep container tightly closed.

P242: Use only non-sparking tools.

P301+310: IF SWALLOWED: Immediately call a POISON

CENTER/doctor.

P303+361+353: IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water/ shower.

P304+340: IF INHALED: Remove person to fresh air and keep

comfortable for breathing.

P312: Call a POISON CENTER/ doctor if you feel unwell.

P308+311: IF exposed or concerned: Call a POISON CENTER/ doctor.

P405: Store locked up.

P403+235: Store in a well ventilated place. Keep cool.

P501: Dispose of contents/container in accordance with

local/regional/national/international regulation.

Other Hazard Statement(s):

-NFPA Ratings:

Health = 0

Fire = 2

Reactivity = 0



Page 3 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

3

COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS Number	Percentage
Solvent naphtha (petroleum), medium aliph.	64742-88-7	50-100
Solvent naphtha (petroleum), light arom.	64742-95-6	2.5-<10
1,2,4-trimethylbenzene	95-63-6	1-<2.5
Xylene	1330-20-7	1-<2.5

^{*}Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4

FIRST AID MEASURES

Description of First Aid Measures:

Inhalation:

Supply fresh air; consult doctor in case of complaints.

Skin Contact:

Immediately rinse with water. Immediately remove all contaminated clothing. If skin irritation occurs, get medical attention. Launder

contaminated clothing before reuse.

Eye Contact:

Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.

Ingestion:

If symptoms persist consult doctor.

Symptoms and Effects, both acute and delayed:

- Most important symptoms and effects, both acute and delayed:

May cause eye irritation. Symptons may include discomfort or pain, excessive blinking and tear production, with possible redness and swelling.

Breathing difficulty

Coughing



Page 4 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard. May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

- Indication of any immediate medical attention and special treatment needed:

Medical supervision for at least 48 hours.

Recommended Actions:

Treat symptomatically. Call a doctor or poison control center for guidance.

FIRE FIGHTING MEASURES

Recommended Fire-Extinguishing Equipment:

Use dry powder, foam, or carbon dioxide fire extinguishers. Do NOT use water.

Possible Hazards During a Fire:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.

Recommendations to Firefighters:

Wear full protective firegear including selfcontaining breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not use a water jet.



Page 5 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid eye contact. Avoid repeated or prolonged

skin contact.

Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Keep

unprotected persons away.

Emergency Procedures:

Contain spilled material, collect in suitable and

properly labeled containers.

Environmental Precautions:

Do not allow product to reach sewage system or

any water course.

Inform respective authorities in case of seepage into water course or sewage system. Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.

Cleanup Procedures:

Absorb with liquid-binding material (sand,

diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

7 HANDLING AND STORAGE

Handling Precautions:

- Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.



Page 6 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

Storage Requirements:

Keep receptacle tightly sealed. Store in cool, dry, dark place, away from direct sunlight.

8

EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

-95-63-6 1,2,4-trimethylbenzene (1-2.5%):

REL TWA: 125 mg/m³, 25 ppm TLV TWA: 123 mg/m³, 25 ppm

-1330-20-7 Xylene (1-2.5%):

PEL TWA: 435 mg/m³, 100 ppm REL STEL: 655 mg/m³, 150 ppm TWA: 435 mg/m³, 100 ppm TLV STEL: 651 mg/m³, 150 ppm TWA: 434 mg/m³, 100 ppm

BEI

- Ingredients with biological limit values:

-1330-20-7 Xylene (1-2.5%):

BEI 1.5 g/g creatinine Medium: urine Time: end of shift

Parameter: Methylhippuric acids

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Have an eye wash station and safety shower near by.

Personal Protective Equipment:

- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

Store protective clothing separately.



Page 7 of 10-

9

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

Avoid contact with the eyes and skin. Wear gloves and goggles.

- Breathing equipment:
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

PHYSICAL AND CHEMICAL PROPERTIES

Color: Amber
Physical State: Liquid
Odor: Petroleum

Odor Threshold: Data not available pH: Data not available Melting Point: Data not available

Boiling Point: 153° C

Boiling Range: Data not available

Flash Point: 40° C

Evaporation Rate:

Flammability:

Data not available

Flammability Limits:

Data not available

Vapor Pressure:

Comparison of the street of t

Solubilities: Not miscible or difficult to mix

Partition Coefficient:

Auto-Ignition Temperature:

Data not available

Decomposition Temperature:

Data not available

Data not available

Viscosity:

Data not available

10 STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Reactivity:

Not reactive under normal conditions.



Page 8 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

Conditions to Avoid:

Extreme temperature, sparks, open flame, and

direct sunlight.

Hazardous Reactions:

No known hazardous reactions.

Incompatible Materials:

Strong oxidizers.

Decomposition Products:

TOXICOLOGICAL INFORMATION

Oxides of carbon.

11 TOX

Routes of Exposure:

Inhalation, skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Exposure Effects:

- · On the skin: May cause mild skin irritation. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis.
- · On the eye: May cause eye irritation.
- Inhalation: May cause respiratory tract irritation.
 Serious effects may be delayed after exposure.
 Ingestion: May be fatal if swallowed and enter airways.

Measures of Toxicity:

-ATE (Acute Toxicity Estimates):

Oral LD50: 158088 mg/kg (rat) Dermal LD50: 3300 mg/kg Inhalative LC50/4 h: 15 mg/l (rat)

-6 4742-88-7 Solvent naphtha (petroleum), medium

aliph.:

Oral LD50: >6500 mg/kg (rat)
Dermal LD50: >3000 mg/kg (rabbit)
Inhalative LC50/4 h: >14 mg/l (rat)



Page 9 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

-64742-95-6 Solvent naphtha (petroleum), light arom.:

Oral LD50: >6800 mg/kg (rat)
Dermal LD50: >3400 mg/kg (rabbit)
Inhalative LC50/4 h: >10.2 mg/l (rat)

-95-63-6 1,2,4-trimethylbenzene:

Oral LD50: 5000 mg/kg (rat) Inhalative LC50/4 h: 18 mg/l (rat)

-1330-20-7 Xylene:

Oral LD50: 4300 mg/kg (rat)
Dermal LD50: 2000 mg/kg (rabbit)
Inhalative LC50/4 h: 6700 mg/l (rat)

Carcinogenic/Mutagenic Precautions:

Xylene: Carcinogenic category 3 (IARC).

12 ECOLOGICAL INFORMATION

Ecological Precautions:

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities

leak into the ground.

Ecological Effects:

No specific environmental or aquatic data available.

13 DISPOSAL CONSIDERATIONS

Disposal Methods:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.



Page 10 of 10-

Gulf Select Complete Induction Combustion Chamber Cleaner

SDS Number: GS252

Disposal Containers:

Use properly approved container for disposal.

Special Precautions:

Do not flush to surface waters or drains.

14 TRANSPORT INFORMATION

UN Number: UN1993

<u>UN Shipping Name:</u> Flammable liquids, n.o.s. (Turpentine substitute,

Solvent naphtha (petroleum), light arom.)

<u>Transport Hazard Class:</u> 3
<u>Packing Group:</u> III

Environmental Hazards:

None

Bulk Transport Guidance:

Data not available

Special Precautions:

DOT quantity limitations of 60 L on passenger aircraft or rail, and 220 L on cargo aircraft.

15 REGULATORY INFORMATION

This material and all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substances Control Act.

16 OTHER INFORMATION

Last Revision Date: 12/28/2015

The information contained in this Safety Data Sheet (SDS) relates only to the specific material designated. The supplier assumes no legal responsibility of the use or reliance upon this data. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the supplier.



Page 1 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

PRODUCT AND COMPANY INFORMATION

<u>Product Name:</u> Gulf Select Tank Boost Fuel System Concentrate Treatment

Revision Date: 12/18/2015 SDS Number: GS254

<u>Common Name:</u> Fuel Additive

<u>CAS Number:</u> Blend <u>Product Code:</u> GS254

Synonyms: Tank boost fuel additive

Company Identification:

Supplier:

NU-TIER BRANDS, INC. 8282 S. Memorial Drive, Suite 302 Tulsa, OK 74133

www.gulflubricants.net

Under license from Gulf Oil LP

For Product Information: 1-800-566-4853

For Emergencies: 1-800-424-9300 (CHEMTREC)

HAZARDS IDENTIFICATION



Signal Word: WARNING

Hazard Classes/Categories:

Flammable liquid, Category 4.
Acute toxicity, Oral category 4.
Acute toxicity, Dermal category 4.
Acute toxicity, Inhalation category 4.



Page 2 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

Skin irritant, Category 2.

Serious eye irritation, Category 2A.

Hazard Statement(s):

H227: Combustible liquid.

H302: Harmful if swallowed.

H312: Harmful in contact with skin.

H332: Harmful if inhaled. H315: Causes skin irritation.

H319: Causes serious eye irritation.

Precaution Statement(s):

P101: If medical advice is needed, have product container or label at

hand.

P102: Keep out of reach of children.

P103: Read label before use.

P210: Keep away from heat, hot surfaces, sparks, open flames and

other ignition sources. No smoking. P264: Wash thoroughly after handling.

P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.

P280: Wear protective gloves/protective clothing/eye protection/face

protection.

P270: Do not eat, drink or smoke when using this product.

P363: Wash contaminated clothing before reuse.

P312: Call a POISON CENTER/ doctor if you feel unwell.

P403+235: Store in a well ventilated place. Keep cool.

P501: Dispose of contents/container in accordance with

local/regional/national/international regulation.

Other Hazard Statement(s):

-NFPA Ratings:

Health = 2

Fire = 2

Reactivity = 0



Page 3 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

3

COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients:

Mixture of the substances listed below with nonhazardous additions.

Chemical Name	CAS Number	Percentage
2-butoxyethanol	111-76-2	50-100
Oleic acid, pure	112-80-1	1-2.5
2-ethylhexan-1-ol	104-76-7	1-2.5

^{*}Any concentration shown as a range is to protect confidentiality or is due to batch variation.

4 FIRST AID MEASURES

Description of First Aid Measures:

Inhalation:

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim has difficulty breathing or is unresponsive, give oxygen with rescue breathing or CPR as required and transport to the pagest modiful facility.

the nearest medical facility.

Skin Contact:

Flush skin with water, wash with soap and water. Remove contaminated clothing. Do not reuse clothing until cleaned. Get medical attention if skin irritation occurs or if otherwise needed.

Discard leather articles saturated with the material.

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 attention.

Ingestion:

DO NOT induce vomiting. Obtain medical attention.



Page 4 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

Symptoms and Effects, both acute and delayed:

-Most important symptoms and effects, both acute and delayed:

Headache

Unconsciousness

Nausea

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health

quantity of this material will result in serious healtr

hazard.

May cause respiratory tract irritation.

Blurred vision

Recommended Actions:

Treat symptomatically. Call a doctor or poison control center for guidance.

FIRE FIGHTING MEASURES

Recommended Fire-Extinguishing Equipment:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Possible Hazards During a Fire:

Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide. Unidentified organic and inorganic compounds.



Page 5 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

Recommendations to Firefighters:

Proper protective equipment including breathing

apparatus.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Avoid breathing vapors.

Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Remove persons from danger area.

Emergency Procedures:

Contain spilled material, collect in suitable and

properly labeled containers.

Environmental Precautions:

Do not allow product to reach sewage system or

any water course.

Inform respective authorities in case of seepage

into water course or sewage system.

Cleanup Procedures:

Absorb with liquid-binding material (sand,

diatomite, acid binders, universal binders, sawdust).

Ensure adequate ventilation.

HANDLING AND STORAGE

Handling Precautions:

Ensure good ventilation/exhaustion at the

workplace.

Prevent formation of aerosols.

Personal protective equipment must be worn. Avoid contact with skin, eyes or clothing. Keep away from ignition sources and high

temperature materials.



Page 6 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

Storage Requirements:

Store at temperatures not exceeding 49 °C/120°F. Keep receptacle tightly sealed. Keep from freezing.

8

EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

-111-76-2 2-butoxyethanol (50-100%)

PEL TWA: 240 mg/m³, 50 ppm

Skin

REL TWA: 24 mg/m³, 5 ppm

Skin

TLV TWA: 97 mg/m³, 20 ppm

BEI

-111-76-2 2-butoxyethanol (50-100%)

BEI 200 mg/g creatinine

Medium: urine Time: end of shift

Parameter: Butoxyacetic acid with hydrolysis

Engineering Controls:

All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).

Personal Protective Equipment:

-General protective and hygienic measures: Wash hands before breaks and at the end of work. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin. Wear gloves and goggles.

-Breathing equipment:

Not necessary if room is well-ventilated. Use suitable respiratory protective device only when aerosol or mist is formed.



Page 7 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

9 PHYSICAL AND CHEMICAL PROPERTIES

Color: Amber Physical State: Liquid Odor: Sweet

Odor Threshold: Data not available Data not available pH: -70.4° C / -95° F **Melting Point: Boiling Point:** 171° C / 340° F Data not available **Boiling Range:** Flash Point: 65° C / 149° F **Evaporation Rate:** Data not available Flammability: Data not available Flammability Limits: Data not available Vapor Pressure: 1 mmHg at 20° C Vapor Density: Data not available

Relative Density: 0.899 g/cm³ (7.502 lbs/gal)

Solubilities: In water: 1 g/L
Partition Coefficient: Data not available
Auto-Ignition Temperature: Data not available
Decomposition Temperature: Data not available
Viscosity: Data not available

10 STABILITY AND REACTIVITY

Stability:

Stable under normal conditions.

Reactivity:

Not reactive under normal conditions.

Conditions to Avoid:

Extreme temperature, sparks, open flame, and

direct sunlight.

Hazardous Reactions:

Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.

Incompatible Materials:

No further relevant information available.



Page 8 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

Decomposition Products:

Oxides of carbon.

11 TOXICOLOGICAL INFORMATION

Routes of Exposure:

Inhalation, skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.

Exposure Effects:

- On the skin: Irritant to skin and mucous membranes.
- On the eye: Irritating effect.
- Inhalation: May cause respiratory tract irritation.
- Ingestion: May cause gastrointestinal irritation, nausea, vomiting, diarrhea.

Measures of Toxicity:

-Fuel Concentrate

Oral LD50 487 mg/kg (rat) (ATE) Dermal LD50 415 mg/kg (ATE) Inhalative LC50/4 h 2.29 mg/l (rat) (ATE)

-111-76-2 2-butoxyethanol

Oral LD50 470 mg/kg (rat) Dermal LD50 400 mg/kg (rab) Inhalative LC50/4 h 2.2 mg/l (rat)

-112-80-1 oleic acid, pure

Oral LD50 74000 mg/kg (rat)

-104-76-7 2-ethylhexan-1-ol

Oral LD50 2049 mg/kg (rat) Dermal LD50 1970 mg/kg (rabbit)

Carcinogenic/Mutagenic Precautions:

2-butoxyethanol: Carcinogenic category 3 (IARC).



Page 9 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

12 ECOLOGICAL INFORMATION

Ecological Precautions:

Do not allow product to reach ground water, water course or sewage system.

Ecological Effects:

- Aquatic toxicity:

-111-76-2 2-butoxyethanol

EC50 (48 h) >1000 mg/L (daphnia)

LC50 (96 h) (static) 1490 mg/l (Lepomis macrochirus)

-112-80-1 oleic acid, pure

LC50 (96 h) 205 mg/l (fish)

13 DISPOSAL CONSIDERATIONS

Disposal Methods:

Dispose of waste material in accordance with all

local, state, and federal requirements.

Disposal Containers:

Use properly approved container for disposal.

Special Precautions:

14

Do not dispose of with household garbage. Do not flush to surface waters or drains.

TRANSPORT INFORMATION

UN Number: UN1993

<u>UN Shipping Name:</u> COMBUSTIBLE LIQUID, N.O.S

Transport Hazard Class: Not Regulated

Packing Group: III

Environmental Hazards:

None



Page 10 of 10-

Gulf Select Tank Boost Fuel System Concentrate Treatment

SDS Number: GS254

Bulk Transport Guidance:

Data not available

Special Precautions:

None

15 REGULATORY INFORMATION

This material and all of its components are listed on the Inventory of Existing Chemical Substances under the Toxic Substances Control Act.

16 OTHER INFORMATION

Last Revision Date: 12/18/2015

The information contained in this Safety Data Sheet (SDS) relates only to the specific material designated. The supplier assumes no legal responsibility of the use or reliance upon this data. This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of the supplier.