

SAFETY DATA SHEET

ILFC Ten 35® (1035®)

VERSION: 1.0

SDS DATE:1/05/2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ILFC Ten 35® (1035®)

SYNONYMS: Fuel Inhibitor & Burn Rate Modifier/Catalyst

MANUFACTURER: International Lubrication and Fuel Consultants (ILFC, Inc.)

ADDRESS: 521 Quantum Road, Rio Rancho, NM 87124

EMERGENCY/CHEMTREC PHONE: +1-800-424-9300

OTHER CALLS: +1-505-892-1666 (M-F, 8:30 am-4:30 pm MST)

FAX: +1-505-892-9601

CHEMICAL NAME: Fuel Inhibitor & Burn Rate Modifier/Catalyst

CHEMICAL FAMILY: Not Applicable

CHEMICAL FORMULA: Complex Mixture

PRODUCT USE: Fuel Additive

This material should not be used for any purpose other than the intended use.

PREPARED BY: ILFC, Inc.

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION

- Flammable liquids, Category 4
- Aspiration hazard, Category 1
- Acute toxicity, Oral, Category 3
- Skin corrosion/irritation, Category 2
- Serious eye damage/eye irritation, Category 2A
- Acute toxicity, Inhalation, Category 4
- Carcinogenicity, Category 2
- Specific target organ toxicity-repeated exposure, Category 2, Liver, Kidneys, Respiratory Tract
- Hazardous to the aquatic environment-Long term hazard, Category 1
- Acute hazards to the aquatic environment, Category 2



HAZARD SUMMARY

DANGER!

HAZARD STATEMENTS

Physical Hazards

H227 Combustible liquid.

Health Hazards

H301 Toxic if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

Environmental Hazards

H410 Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking.

P242 Use only non-sparking tools.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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SECTION 2: HAZARDS IDENTIFICATION (cont.)

P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
<i>Response</i>	
P301+P315+P331	IF SWALLOWED: Get immediate medical advice/attention. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340+P313	IF INHALED: Remove person to fresh air and keep comfortable breathing. Get medical advice/attention.
P305+P351+P338 +P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing. Get medical advice/attention.
P306+P363	IF ON CLOTHING: Wash contaminated clothing before reuse.
P370+P378	in case of fire: Use carbon dioxide foam, dry chemical or smart media extinguisher to extinguish.
<i>Storage</i>	
P403+P404	Store in a well ventilated place. Store in a closed container.
<i>Disposal</i>	
P501	Dispose of contents/container to a chemical landfill as approved by current, local, state and federal laws and regulations.

NFPA HAZARD CLASSIFICATION:

HEALTH: 3 FLAMMABILITY: 2 REACTIVITY: 0 OTHER: None

ROUTES OF ENTRY:

Eyes
Skin
Ingestion
Inhalation

ACUTE HEALTH HAZARDS:

No data is available for ILFC Ten35® as it is a complex mixture. Possible symptoms of exposure may include the following.

PROPRIETARY AMINE COMPOUND:

EYES - Can cause irritation, redness, blurred vision and possible permanent damage.
SKIN - Prolonged contact can cause irritation, corrosion to the skin, burns.
INGESTION - Harmful or fatal if swallowed. Can cause gastrointestinal irritation, nausea, vomiting and diarrhea.
Aspiration into the lungs may cause lung damage and possible death.
INHALATION - High concentrations can cause irritation, dizziness, nausea, fatigue, headache and unconsciousness or asphyxiation and possible death.

PETROLEUM DISTILLATE:

EYES - Can cause irritation.
SKIN - Can cause irritation.
INGESTION - Can cause central nervous system depression. Aspiration into the lungs may cause lung damage.
INHALATION - Can cause central nervous system depression.

PROPRIETARY ACRYLIC COPOLYMER:

EYES - Can cause irritation.
SKIN - Can cause irritation.

1-DECENE, HOMOPOLYMER, HYDROGENATED:

INGESTION -Aspiration into the lungs may cause lung damage.

PROPRIETARY CATALYST:

EYES - Can cause irritation.
SKIN - Can cause irritation.
INGESTION - Harmful if swallowed.
INHALATION - Can cause irritation.

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SECTION 2: HAZARDS IDENTIFICATION (cont.)

PROPRIETARY PRESERVATIVE:

EYES - Can cause irritation, redness, blurred vision and possible permanent damage.

SKIN - Prolonged contact can cause irritation, corrosion to the skin, burns and absorption of harmful amounts.

INGESTION - Low toxicity if small amounts are swallowed. Aspiration into the lungs may cause lung damage.

INHALATION - Can cause irritation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT

CONCENTRATIONS

Proprietary Amine Compound (Mixture)

30 - 60%

Petroleum Distillate (CAS #64742-47-8)

25 - 55%

Proprietary Acrylic Copolymer Compound (Mixture)

8- 33%

1-decene, homopolymer, hydrogenated (CAS #68037-01-4)

<= 10%

Proprietary Catalyst (Mixture)

<= 10 %

Proprietary Preservative (Mixture)

< 0.1 %

SECTION 4: FIRST AID MEASURES

EYES: Flush with copious amounts of water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Get medical attention.

SKIN: Wash with soap and water for at least 15 minutes. Remove contaminated clothing. Wash contaminated clothing before re-use. Discard contaminated shoes, belts and other articles made of leather.

INGESTION: Do not induce vomiting, keep warm, get IMMEDIATE medical attention.

INHALATION: Remove to fresh air. If breathing is impaired, get medical attention.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: If swallowed, DO NOT induce vomiting due to the risk of aspiration posed by petroleum distillates.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT: 164°F PMCC
FLAMMABILITY: Combustible Liquid
UPPER EXPLOSION LIMIT: No Data Available
LOWER EXPLOSION LIMIT: No Data Available

EXTINGUISHING MEDIA: Carbon dioxide foam, dry chemical or smart media extinguisher.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus. Do not extinguish with water.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Closed containers may explode when heated.

HAZARDOUS DECOMPOSITION PRODUCTS: Irritating and/or toxic fumes including carbon monoxide, carbon dioxide, nitrogen and sulfur compounds may be released.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Clean spill with absorbent material. Eliminate ignition sources. Use full face NIOSH approved organic respirator if odor is prevalent. Avoid runoff into storm sewers and ditches which lead to waterways. Do not store greasy materials in enclosed containers for long periods of time.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Protect from physical damage. Store in a cool, dry ventilated area away from acids, alkalis, and open flames. Keep in original container or a properly labeled and approved alternative made from compatible material.

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SECTION 7: HANDLING AND STORAGE (cont.)

OTHER PRECAUTIONS: Containers may be hazardous when empty. Do not cut, grind, weld or drill on or near empty containers.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

CHEMICAL NAME	REGULATION	TYPE OF LISTING	VALUE
Proprietary Amine Compound	Manufacturer Manufacturer NTP / IARC / OSHA	TWA STEL Carcinogenicity	1 pp 2.5 ppm N.D.A.*
Petroleum Distillate	ACGIH NTP / IARC / OSHA	TLV Carcinogenicity	200 ppm N.D.A.*
Proprietary Acrylic Copolymer Compound	ACGIH NTP / IARC / OSHA	TWA Carcinogenicity	5 mg/m ³ N.D.A.*
1-decene, homopolymer, hydrogenated	ACGIH OSHA NTP / IARC / OSHA	TLV (inhalation) PEL Carcinogenicity	5 mg/m ³ 5 mg/m ³ No
Proprietary Catalyst	ACGIH OSHA NTP / IARC / OSHA	TWA TWA Carcinogenicity	10 mg/m ³ 5 mg/m ³ No
Proprietary Preservative	ACGIH OSHA NTP / IARC / OSHA	TWA PEL Carcinogenicity	20 ppm skin 70 mg/m ³ 20ppm skin N.D.A.*

*N.D.A. No Data Available

ENGINEERING CONTROLS: Use non sparking equipment.

VENTILATION : Use local exhaust to maintain levels below TWA/TLV limits.

RESPIRATORY PROTECTION: Use NIOSH approved organic respirator if odor is prevalent.

EYE PROTECTION: Wear safety glasses or goggles.

SKIN PROTECTION: Wear as appropriate: Chemical resistant apron, protective suit, boots.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Wear chemical resistant (nitrile, butyl rubber, neoprene) gloves.

WORK HYGIENIC PRACTICES: Facilities storing or utilizing this material should be equipped with an eyewash station.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Amber to Orange Liquid
ODOR:	Organic, Solvent
ODOR THRESHOLD:	No Data Available
pH:	No Data Available
MELTING POINT:	No Data Available
BOILING RANGE:	No Data Available
FLASH POINT:	164°F PMCC
EVAPORATION RATE:	< 1 (Butyl Acetate = 1)
FLAMMABILITY:	Combustable Liquid
UPPER EXPLOSION LIMIT:	No Data Available
LOWER EXPLOSION LIMIT:	No Data Available
VAPOR PRESSURE:	No Data Available
VAPOR DENSITY:	No Data Available
DENSITY:	6.86 lb/gal
SOLUBILITY IN WATER:	Slight
PARTITION COEFFICIENT:	No Data Available
DECOMPOSITION TEMPERATURE:	No Data Available
VISCOSITY:	12.9 cps @ 40° C

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SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY): Open Flame

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents, acids

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: None

SECTION 10: STABILITY AND REACTIVITY (cont)

HAZARDOUS POLYMERIZATION: None

CONDITIONS TO AVOID POLYMERIZATION: None

SECTION 11: TOXICOLOGICAL INFORMATION

No data is available for ILFC Ten35® as it is a complex mixture. The information provided is based on profiles of raw materials of similar composition.

This proprietary amine compound is a severe eye irritant. The acute oral LD50 (rat) is .612 gm/kg. The acute dermal LD50 (rat) is .251 gm/kg. The acute inhalation LC50 is greater than 1 mg/L for one hour exposure (rat).

CARCINOGENICITY: NTP- No Data Available IARC- No Data Available OSHA- No Data Available

The petroleum distillate acute oral LD50 (rat) is >5000 mg/kg. The acute dermal LD50 (rabbit) is >2000 mg/kg.

CARCINOGENICITY: NTP-No Data Available IARC- No Data Available OSHA- No Data Available

The proprietary acrylic copolymer compound is an eye irritant. Skin irritations may occur with prolonged exposure. The acute oral LD50 (rat) is > 2000 mg/kg. The acute dermal LD50 rabbit is > 2000 mg/kg.

CARCINOGENICITY: NTP-No Data Available IARC- No Data Available OSHA- No Data Available

The 1-decene, homopolymer, hydrogenated may cause skin and eye irritation. The acute oral LD50 (rat) is >5000 mg/kg.

CARCINOGENICITY: NTP-NO IARC-NO OSHA-NO

The proprietary catalyst is an eye irritant. Harmful if swallowed. May be harmful if inhaled or absorbed through the skin. The acute oral LD50 (rat) is 1320 mg/kg.

CARCINOGENICITY: NTP-NO IARC- NO OSHA- NO

The proprietary preservative is a severe eye irritant. Burns may occur with repeated skin contact. The acute oral LD50 (rat) is 620 mg/kg. The acute dermal LD50 (rabbit) is 420 mg/kg.

CARCINOGENICITY: NTP-No Data Available IARC- No Data Available OSHA- No Data Available

SECTION 12: ECOLOGICAL INFORMATION

No data is available for ILFC Ten35® as it is a complex mixture. The information provided is based on profiles of raw materials of similar composition.

PROPRIETARY AMINE COMPOUND:

Ecotoxicity in water (LC50): 1.3 mg/l 96 hours (Rainbow trout).

Ecotoxicity in water (EC50): 4.1 mg/l 48 hours (Daphnia magna).

Not readily biodegradable.

PETROLEUM DISTILLATE:

Readily biodegradable.

PROPRIETARY ACRYLIC COPOLYMER COMPOUND:

No data is available for this material.

1-DECENE, HOMOPOLYMER, HYDROGENATED:

No data is available for this material.

PROPRIETARY CATALYST:

Ecotoxicity in water (EC50): 1.5-2.6 mg/l 48 hours (Daphnia magna).

Not readily biodegradable.

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SECTION 12: ECOLOGICAL INFORMATION (cont.)

PROPRIETARY PRESERVATIVE:

Ecotoxicity in water (LC50): 2.3 mg/l 96 hours (Rainbow trout).
Ecotoxicity in water (EC50): 3.23 mg/l 48 hours (Daphnia magna).
Readily biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Incinerate or dispose of waste in a chemical landfill as approved by current, local, state and federal laws and regulations.

RCRA HAZARD CLASS: No Data Available

SECTION 14: TRANSPORT INFORMATION

DOT / IATA - NON BULK CONTAINERS (119 Gal. or less each)

PROPER SHIPPING NAME: Toxic, Liquids, Organic, N.O.S. (t-alkylamines)
HAZARD CLASS: 6.1
UN NUMBER: UN 2810
PACKING GROUP: III
LABEL REQUIRED: Toxic
ERG: 153

DOT / IMDG / IATA - BULK CONTAINERS

PROPER SHIPPING NAME: Flammable Liquids, Toxic, N.O.S. (Naptha, t-alkylamines)
HAZARD CLASS: 3, 6.1
UN NUMBER: UN 1992
PACKING GROUP: III
LABELS REQUIRED: Combustible, Toxic, Marine Pollutant
ERG: 131

IMDG - NON BULK CONTAINERS

PROPER SHIPPING NAME: Toxic, Liquids, Organic, N.O.S. (t-alkylamines)
HAZARD CLASS: 6.1
UN NUMBER: UN 2810
PACKING GROUP: III
LABELS REQUIRED: Toxic, Marine Pollutant
ERG: 153

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION): This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200)

WHMIS: This product is a 'controlled product' under the Canadian Workplace Hazardous Materials Information System (WHMIS)

TSCA (TOXIC SUBSTANCE CONTROL ACT): All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (USCA) Chemical Substance Inventory.

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): This material is regulated under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) Title III Section 304. This material is or contains chemical(s) listed in 40 CFR Table 302.4 or nondesignated RCRA ICR substance(s). (Nondesignated ICR substances apply to materials that will not be reused). Releases in excess of reportable quantity must be reported to the National Response Center (1-800-424-8802) and the appropriate state and local emergency response organizations.

SARA TITLE III: SECTION 311/312 HAZARD CATEGORIES: Acute Health Hazard. Chronic Health Hazard.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to

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SECTION 16: OTHER INFORMATION (cont.)

the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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