iLAST OCTANE BOOSTER 12 FL.OZ.

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Issue date: 07/01/2022 Revision date: 07/01/2022 Version: 2.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Trade name : iLAST OCTANE BOOSTER 12 FL.OZ.

Product code : FPiL0010

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Octane Enhancer

1.3. Details of the supplier of the safety data sheet

US Global Petroleum
9101 Fullerton Avenue
Franklin Park, IL 60131 - USA
T 773-376-9660

1.4. Emergency telephone number

Emergency number : CHEMTREC 24 Hour 1-800-424-9300, 1-703-527-3887 (International)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 3 H226 Flammable liquid and vapor
Aspiration hazard Category 1 H304 May be fatal if swallowed and enters airways

Full text of H- and EUH-statements: see section 16

2.2. Label elements

GHS US labeling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H226 - Flammable liquid and vapor
H304 - May be fatal if swallowed and enters airways

Precautionary statements (GHS US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 - Keep container tightly closed.
P240 - Ground/Bond container and receiving equipment.
P241 - Use explosion-proof electrical, ventilating, lighting equipment
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P280 - Wear protective gloves,protective clothing,eye protection,face protection
P301+P310 - If swallowed: Immediately call a poison control center, doctor,physician,
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P331 - Do NOT induce vomiting.
P370+P378 - In case of fire: See Section 5.1 Extinguishing Media
P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 - Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

2.3. Other hazards

Other hazards which do not result in classification : None under normal conditions.

2.4. Unknown acute toxicity (GHS US)

No data available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Distillates (Petroleum), Hydrotreated Light	(CAS-No.) 64742-47-8	≥ 95	Asp. Tox. 1, H304
2-Methoxy-2-Methylpropane	(CAS-No.) 1634-04-4	1 – 5	Flam. Liq. 2, H225 Skin Irrit. 2, H315

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Respiratory arrest: artificial respiration or oxygen. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation : Remove the victim into fresh air. If you feel unwell, seek medical advice. Allow affected person to breathe fresh air. Allow the victim to rest.

First-aid measures after skin contact : Wash contaminated clothing before reuse. If skin irritation occurs: seek medical attention. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

First-aid measures after eye contact : Get medical advice/attention. Immediately flush eyes thoroughly with water for at least 15 minutes. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor/physician.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : If you feel unwell, seek medical advice.

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : May cause slight irritation . May cause moderate irritation. Itching. Red skin. Skin rash/inflammation.

Symptoms/effects after eye contact : May cause slight eye irritation . May cause severe irritation. Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapor.

Explosion hazard : May form flammable/explosive vapor-air mixture.

Reactivity : On heating: release of harmful/irritant gases/vapours.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Eliminate ignition sources. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Use protective clothing. Ventilate area. Remove ignition sources. Use special care to avoid static electric charges. No open flames. No smoking.

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Safety glasses.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment : Dam up the liquid spill. Contain released product, collect/pump into suitable containers. Plug the leak, cut off the supply.

Methods for cleaning up	:	Absorbed substance: shovel into drums. Cover spill with inert material, e.g.: sand, earth, vermiculite, kieselguhr, powdered limestone. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	:	Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling	:	Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. No open flames. No smoking. Take precautionary measures against static discharge. Use only non-sparking tools.
Handling temperature	:	Do not heat or store at temperature above 120 F
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash affected areas thoroughly after handling. Always wash hands after handling the product. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Ground/bond container and receiving equipment. Comply with applicable regulations. Provide local exhaust or general room ventilation. Take precautionary measures against static discharge. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof electrical, ventilating, lighting equipment.
Storage conditions	:	Keep only in the original container in a cool, well ventilated place away from : Keep container tightly closed.
Incompatible products	:	Oxidizing agent. Strong bases. Strong acids.
Incompatible materials	:	Sources of ignition. Direct sunlight. Heat sources.

7.3. Specific end use(s)

Follow Label Directions.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

iLAST OCTANE BOOSTER 12 FL.OZ.	
No additional information available	

2-Methoxy-2-Methylpropane (1634-04-4)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	50 ppm

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA [ppm]	200 ppm 8 Hours
USA - NIOSH - Occupational Exposure Limits	
NIOSH REL (TWA)	100 mg/m³

8.2. Appropriate engineering controls

Appropriate engineering controls	:	Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work station. Local exhaust venilation, vent hoods.
Environmental exposure controls	:	Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Gloves. Safety glasses. Avoid all unnecessary exposure.

Materials for protective clothing:

Excellent resistance:

Hand protection:

Wear protective gloves

Eye protection:

Face shield. Chemical goggles or safety glasses

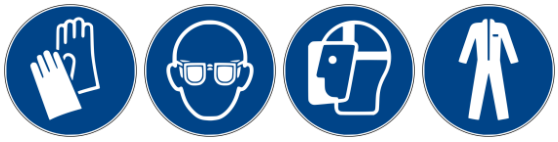
Skin and body protection:

Protective clothing

Respiratory protection:

Wear gas mask if concentration in air > exposure limit. Respiratory protection of the dependent type. Wear respiratory protection.

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Liquid.
Color	:	Colourless to light yellow.
Odor	:	Ethereal. Strong odour.
Odor threshold	:	No data available
pH	:	N/A
Relative evaporation rate (butyl acetate=1)	:	No data available
Melting point	:	No data available
Freezing point	:	No data available
Boiling point	:	> 240 °C
Flash point	:	57 °C
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Flammability	:	No data available
Vapor pressure	:	N/A
Relative vapor density at 20 °C	:	No data available
Relative density	:	0.798
Solubility	:	Poorly soluble in water. Water: < 2 % Slight
Partition coefficient n-octanol/water (Log Pow)	:	No data available
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Viscosity, kinematic	:	1.7 cSt @ 40 deg C
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
Explosion limits	:	0.7 – 6 vol % Estimated

9.2. Other information

VOC content	:	2.5 %

SECTION 10: Stability and reactivity

10.1. Reactivity

On heating: release of harmful/irritant gases/vapours.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7). Flammable liquid and vapor. May form flammable/explosive vapor-air mixture.

10.3. Possibility of hazardous reactions

May react violently with oxidants. Not established.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

Toxic fume. . Carbon monoxide. Carbon dioxide. May release flammable gases.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

iLAST OCTANE BOOSTER 12 FL.OZ.	
LC50 Inhalation - Rat [ppm]	23576 ppm/4h Methlyl tert-butyl ether (MTBE)
ATE US (gases)	23576 ppmV/4h

2-Methoxy-2-Methylpropane (1634-04-4)	
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg body weight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 Inhalation - Rat	85 mg/l (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
ATE US (vapors)	85 mg/l/4h
ATE US (dust, mist)	85 mg/l/4h

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
LD50 oral rat	> 5000 mg/kg body weight
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 5.28 mg/l/4h Based on lack of mortality and systemic effects

Skin corrosion/irritation : Not classified
pH: N/A

Serious eye damage/irritation : Not classified
pH: N/A

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : Not classified

Aspiration hazard : May be fatal if swallowed and enters airways.

Viscosity, kinematic : 1.7 mm²/s @ 40 deg C

Potential Adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

Symptoms/effects : If you feel unwell, seek medical advice.

Symptoms/effects after inhalation : May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/effects after skin contact : May cause slight irritation . May cause moderate irritation. Itching. Red skin. Skin rash/inflammation.

Symptoms/effects after eye contact : May cause slight eye irritation . May cause severe irritation. Irritation of the eye tissue. Inflammation/damage of the eye tissue. Redness of the eye tissue.

Symptoms/effects after ingestion : May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1. Toxicity

2-Methoxy-2-Methylpropane (1634-04-4)	
LC50 - Fish [1]	672 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value, Lethal)
EC50 - Crustacea [1]	472 mg/l (US EPA, 48 h, Daphnia magna, Flow-through system, Fresh water, Experimental value, Locomotor effect)

12.2. Persistence and degradability

iLAST OCTANE BOOSTER 12 FL.OZ.	
Persistence and degradability	Not established.

2-Methoxy-2-Methylpropane (1634-04-4)	
Persistence and degradability	Not readily biodegradable in the soil. Not readily biodegradable in water.

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

iLAST OCTANE BOOSTER 12 FL.OZ.	
Bioaccumulative potential	Not established.

2-Methoxy-2-Methylpropane (1634-04-4)	
BCF - Fish [1]	1.5 (28 day(s), Cyprinus carpio, Flow-through system, Experimental value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	1.06 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 20 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

2-Methoxy-2-Methylpropane (1634-04-4)	
Surface tension	19.3 mN/m (25 °C, 100 %, EU Method A.5: Surface tension)
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	0.96 (log Koc, Calculated value)
Ecology - soil	Highly mobile in soil.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to appropriate waste disposal facility, in accordance with local, regional, national, international regulations.

Additional information : Handle empty containers with care because residual vapors are flammable.

Ecology - waste materials : Avoid release to the environment. Hazardous waste due to toxicity.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

US DOT (ground) (DOT) : UN1993 Flammable liquids, n.o.s. (Petroleum Distillates, MTBE) (55 deg C c.c.) , 3, III

UN-No.(DOT) : UN1993

Proper Shipping Name (DOT) : Flammable liquids, n.o.s. (Petroleum Distillates, MTBE) (55 deg C c.c.)

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger

DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102)	:	B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	60 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	220 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.
Other information	:	No supplementary information available.

Transport by sea

UN-No. (IMDG)	:	1993
Class (IMDG)	:	3 - Flammable liquids

Air transport

UN-No. (IATA)	:	1993
Proper Shipping Name (IATA)	:	Flammable liquids, n.o.s. (Petroleum Distillates, MTBE) (55 deg C c.c.)
Class (IATA)	:	3 - Flammable Liquids
Packing group (IATA)	:	III - Minor Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

iLAST OCTANE BOOSTER 12 FL.OZ.	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Fire hazard Delayed (chronic) health hazard

2-Methoxy-2-Methylpropane (1634-04-4)	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Fire hazard Immediate (acute) health hazard

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard

15.2. International regulations

CANADA

iLAST OCTANE BOOSTER 12 FL.OZ.	
WHMIS Classification	Class B Division 2 - Flammable Liquid

Distillates (Petroleum), Hydrotreated Light (64742-47-8)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

15.2.2. National regulations

No additional information available

15.3. US State regulations

iLAST OCTANE BOOSTER 12 FL.OZ.()	
U.S. - California - Proposition 65 - Carcinogens List	No
U.S. - California - Proposition 65 - Developmental Toxicity	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Female	No
U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No

2-Methoxy-2-Methylpropane (1634-04-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

Distillates (Petroleum), Hydrotreated Light (64742-47-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significant risk level (NSRL)
No	No	No	No	

SECTION 16: Other information

Other information : None.

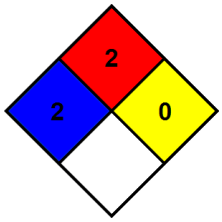
Full text of H-phrases:

H225	Highly flammable liquid and vapor
H226	Flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 2 Moderate Hazard

Physical : 0 Minimal Hazard

Personal protection : B

The Supplier identified in Section 1 of this SDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product

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