BRAZILIAN BIOCOMBUSTÍVEIS LTDA SAFETY DATA SHEET **BBL 100** BBL DX Technology - Advanced Renewable Diesel and SAF Patent n. BR 11 2022 011447-8 A2



CHEMICAL SAFETY DATA SHEET - MSDS

01 - IDENTIFICATION OF THE PRODUCT AND THE COMPANY

Product Name: BBL-100 EXPERIMENTAL FUEL

Internal identification code: BBL-100

Main recommended uses for the

substance or mixture:

Used as fuel.

Company Name: Brazilian Biocombustíveis Ltda

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02 - HAZARD IDENTIFICATION

Most important hazards: Flammable liquids and vapours. It causes skin irritation. It

can cause respiratory irritation. It may cause drowsiness and vertigo (narcotic effects). It can be deadly if swallowed

and penetrated into the respiratory tract.

Adverse effects on human

health:

It can cause irritation of the upper airways if inhaled. It can cause narcotic effects. It causes skin irritation and may cause

mild eye irritation. Suspected of causing cancer.

Environmental effects: It can present a danger to the environment in the event of

large spills.

Physical and chemical hazards: Flammable liquid and vapors;

Specific Hazards: Flammable liquid and vapours. Containers can explode if

heated; When heated, this liquid releases irritating and

toxic gases;



Main symptoms: Redness, pain, and tearing in the eyes and skin. Nausea, vomiting and

abdominal cramps. Cough and severe respiratory failure. Dizziness, vertigo, headaches, mental confusion, loss of consciousness; Choking and

Dipnea;

Product Hazard Classification: Flammable liquids – Category 3: Acute toxicity –

Inhalation - Category 4; Corrosive/irritating to

the skin – Category 2;

Systemic toxicity to the target organ after single exposure – Category 3;

Aspiration hazard – Category 1.

Adopted classification system: ABNT-NBR 14725 Standard-Part 2:2009

APPROPRIATE LABELLING ELEMENTS

Words of warning: DANGER

Danger Phrases: Flammable liquid and vapors;

Harmful if inhaled; Causes skin irritation;

Causes damage to the gastrointestinal tract, central nervous system, and

lungs if ingested;

It may cause drowsiness and vertigo (narcotic effects). It can cause damage to the liver and

kidneys if ingested;

It can cause respiratory irritation;

It can be deadly in case of ingestion and by penetration into the

respiratory tract;

Precautionary Phrases: Keep away from heat and ignition sources;

Store in a cool/low temperature and ventilated place; When in

use, do not smoke:

Avoid contact with eyes and skin; Never vacuum (dust, steam or mist); Do not use in a place without adequate ventilation; Wear appropriate PPE;

If swallowed, rinse the mouth with water (only if the victim is conscious); Use containment means to avoid environmental contamination; Do not allow the product to come into contact with water bodies;



03 - COMPOSITION AND INFORMATION ABOUT THE INGREDIENTS

Common chemical name or

technical name:

Biofuel

Petroleum substance group: Blend of vegetable oils, mineral alcohols, complex blends of other

organic compounds

Synonym: Automotive biofuel, ect.

CAS Registration Number: NA

Impurities that contribute to the danger:

Skin contact:

Contact with eyes:

Makings	Concentration (%)	CAS
Sulfur compound	-	IN
Nitrogenous compound	-	IN
Oxygenated compound	-	IN
Sulphur	Max.6 mg/kg	IN

04 - FIRST AID MEASURES

Remove the victim to a ventilated place and keep him at rest.

Monitor respiratory function. If the victim is breathing hard, provide

Inhalation: oxygen. If necessary, apply artificial respiration. Seek medical attention

. Take this SDS

Remove contaminated clothing and shoes. Wash exposed skin with

a large amount of water for at least 15 minutes. Seek medical

attention. Take this SDS.

Rinse under running water for at least 15 minutes, keeping your

eyelids open. Remove contact lenses when appropriate. Seek medical

attention immediately. Take this SDS.

Rinse the victim's mouth with plenty of water. DO NOT INDUCE

VOMITING. Seek medical attention. Take this SDS.

Avoid contact with the product when helping the victim. Keep the

and/or notes to doctor: victim resting and warm. Do not give

Rescue provider protection anything through your mouth to an unconscious person. Symptomatic

treatment should include, above all,

supportive measures such as correction of hydroelectrolytic and

metabolic disorders, as well as respiratory assistance.



05 - FIREFIGHTING MEASURES

Means of extinguishing:

Suitable: Compatible with hydrocarbon foam, water mist, chemical powder and carbon dioxide (CO2). Not recommended: Water directly on the burning liquid.

Specific hazards of the mixture or combustion of the chemical or its packaging can form substance:

irritating and toxic gases such as monoxide, carbon dioxide and hydrogen sulfide. Very dangerous when exposed to excessive heat or other sources of ignition such as: sparks, open flames or flames from matches and cigarettes, welding operations, pilot lamps and electric motors. It can accumulate static charge by flow or agitation. The vapors of the heated liquid may be ignited by static discharge. The vapors are denser than air and tend to accumulate in low-lying or confined areas, such as manholes, basements, etc. They can travel over great distances, causing flame retreat or new fire outbreaks in both open and confined environments. Containers may explode if heated.

Protective measures for the team of Respiratory protective equipment of the autonomous type (SCBA) with fire fighting:

positive pressure and full protective clothing. Containers and tanks involved in the fire must be cooled with water mist.

06 - CONTROL MEASURES FOR SPILLAGE OR LEAKAGE

For non-emergency services personnel:

Isolate the leak from ignition sources. Prevent sparks or emergency services: flames. Do not smoke. Evacuate the area within a radius of 50 meters. Do not touch damaged containers or spilled material without wearing proper clothing. Avoid inhalation, contact with eyes and skin.

For emergency service personnel .

Use complete PPE, with protective PVC gloves, safety glasses with side protection and appropriate protective clothing. The material used must be waterproof. In case of large leaks, where exposure is great, it is recommended to use a protective mask with a filter against vapors or mists.

Environmental Cautions:

Prevent the spilled product from reaching waterways and sewer systems. Dilution water from firefighting can cause pollution. Do not dispose of directly into the environment or sewer system.



Methods and materials for containment and cleaning:

Use water mist or vapor suppressant foam to reduce the dispersion of vapors. Use natural or spill containment barriers. Collect the spilled product and place it in proper containers. Adsorb the remaining product with dry sand, soil, vermiculite, or any other inert material. Place the adsorbed material in appropriate containers and remove them to a safe place.

Differences in the action of large and small leaks:

There is no distinction between the actions of large and small leaks for this product.

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