



1. IDENTIFICATION OF CHEMICAL PRODUCTS AND INFORMATION ON THE MANUFACTURER AND / OR SUPPLIER

Technical name	Aviation gasoline Avgas 100LL
Brief recommendations for use	Designed for use in aircraft with spark ignition piston aircraft engines.
Name of the organization	LIMITED LIABILITY COMPANY «ECOTECHNOKHIM»
Address	188744, Russia, Leningradskiy region, Priozerskiy rayon, p/st Gromovo, Zheleznodorozhniy per., bld. 1
Telephone for emergency consultation	112
FAX	+7-812-309-68-47
E-mail	info@aviatopfuel.ru
Web-site	www.aviatopfuel.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Classification	-Flammable chemical products
Warning labeling	-Low-hazard products by the degree of impact on the body - Grade 4
Signal word	DANGEROUS
Danger Symbols	 
H-phrases	<p>H225: Flammable liquid. Vapors form explosive mixtures with air</p> <p>H336: May cause drowsiness or dizziness.</p> <p>H361: It is believed that this substance may adversely affect fertility or an unborn baby.</p> <p>H373: May cause damage to organs through prolonged or repeated exposure.</p>
P-phrases	<p>P210: Keep away from sources of ignition. No smoking.</p> <p>P233: Keep in tightly closed / sealed packaging.</p> <p>P242: Use intrinsically safe tools</p> <p>P243: Keep away from static electricity.</p> <p>P280: Use gloves / work clothing / eye protection / face protection</p> <p>P403+P235: Store in a cool, well-ventilated place.</p> <p>P264: Wash hands thoroughly after handling.</p> <p>P332+P311: Seek medical attention if skin irritation occurs.</p> <p>P261: Avoid breathing gas / vapor / aerosol.</p> <p>P271: Use only outdoors or in a well-ventilated area.</p> <p>P201+P202: Before use, take a briefing on working with this product and read the safety instructions</p> <p>P308+P311: If exposure is suspected, seek medical attention</p>

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components (INCI)	Concentration (%)	Number CAS	Number EC
Stabilized hydrocarbon fraction (isomerizes)	0-40	No	No
High-octane gasoline component	20-50	86290-81-5	289-220-8
Toluene	10-30	108-88-23	203-625-9
Tetraethyl lead	0,10-0,13	78-00-2	201-075-4

4. FIRST AID MEASURES

In case of contact with eyes	Rinse thoroughly with warm water for several minutes. If irritation occurs, seek medical attention.
When exposed to skin	Remove excess with a cotton swab. Wash skin with warm, soapy water. If necessary, consult a doctor.
If swallowed	If the product is swallowed, rinse the victim's mouth with water and provide a drink. Do not induce vomiting. Seek medical attention if necessary.
Inhalation	When inhaled - fresh air, peace, warmth; strong tea or coffee. Seek medical attention if necessary.
The most important symptoms The potential hazardous effects	Eye contact - redness, irritation of the mucous membrane of the eye. Skin contact - irritating effect. If swallowed, nausea, vomiting. When inhaled - headaches, dizziness, impaired coordination of movement.

5. FIRE FIGHTING MEASURES

Flammability	Flammable liquid
Thermal decomposition products	Carbon monoxide, carbon dioxide.
Fire and explosion safety	Gasoline vapors form explosive mixtures
Ways of fire extinguishing	When igniting aviation gasoline, the following is used: atomized water, foam, for volume extinguishing - carbon dioxide, the composition of FBG and superheated steam.
Specificity for extinguishing	In case of fire, free up the danger zone and remove all nearby people who are not involved in the elimination of the fire. Use personal protective equipment - protective clothing, respiratory protection (self-contained breathing apparatus).

6. MEASURES IN CASE OF ACCIDENTAL RELEASE/LEAKAGE

Individual precautions	Avoid contact with the product. Do not breathe vapor. Wear suitable protective clothing and protective equipment. When spilling aviation gasoline, it is necessary to collect it in a separate container, wipe the spill site with a dry rag; when spilling in an open area - fill the spill with sand, followed by its removal and disposal in accordance with the sanitary-epidemiological rules and regulations.
Environmental precautions	Equipment and apparatus for the discharge and filling of aviation gasoline should be sealed to prevent aviation gas from entering household, industrial and storm sewage systems, as well as into open water bodies and soil, and its vapor into the air.
Contamination and cleaning	Places of possible release of chemicals into the air of the working area should be equipped with local exhaust devices.

7. HANDLING AND STORAGE

Precautions and safe handling	Places of possible release of chemicals into the air of the working area should be equipped with local exhaust devices. In places with aviation gas vapor content exceeding the MPC, it is allowed to work only with the use of respiratory protection equipment: short-term filtering gas masks with a box of the BKF or DOT-600 brand, long-term hose gas masks of the PSh-1 brand.
Precautionary measures Safe storage	When storing aviation gasoline, measures must be taken to prevent aviation gasoline from entering household and storm sewage systems, as well as into open water bodies. It is allowed to store gasoline in tanks without pontoons and gas piping until overhaul, as well as in long-term storage facilities. Aviation gasoline is not allowed to be stored in tanks with a floating roof. Tanks and pipelines intended for storage and transportation of aviation

gasoline must be protected from static electricity. In the premises for storage and operation of aviation gasoline, open fire is prohibited, artificial lighting must be performed in an explosion-proof version. Guaranteed shelf life of products - 1 year from the date of manufacture.

8. PERSONAL PROTECTIVE EQUIPMENT

Personal protection
Equipment
Management

Premises in which work is carried out with aviation gasoline must be equipped with general exchange supply and exhaust ventilation with mechanical motivation.

Personal protective equipment
Eye protection



Respiratory protection



Hand skin protection



Special means

Absent

9. PHYSICAL AND CHEMICAL PROPERTIES

Specifications	Indicators
Appearance	Clear blue liquid.
Odour	Sweet-caustic smell of benzene.
pH	Neutral
Melting point / freezing point, ° C	< minus 60°C
Boiling point and boiling point, ° C	Initial boiling less than 40 °C, final boiling point – 170°C.
Flash point	From minus 34 °C to minus 38 °C
Flammability (solid / gas)	Flammable liquid.
Upper / lower flammability limits or explosive limits	Upper limit: minus 5°C Lower limit: minus 40°C
Vapor pressure, kPa	38,0 – 49,0
Vapor density	≥1
Relative density	Density at 15 °C - 690-740 kg/m ³
Solubility (s)	Does not dissolve in water.
Partition coefficient: n-octanol / water	Nafta ≥4
Auto-ignition temperature, ° C	From 380 °C to 475 °C
Decomposition temperature, ° C	> 180 °C
Viscosity	0,65 sSt
Explosive properties	Gasoline vapors form explosive mixtures with air.
Oxidizing properties	Oxidized

10. STABILITY AND REACTIVITY

Chemical stability	It is possible to cause a reaction with strong oxidizing products.
Solubility	Not soluble in water.

11. TOXICITY INFORMATION

Acute toxicity	Toxicity indicators are given by components: High-octane gasoline component: LD50 (oral, rat) -> 5000 mg/kg; LD50 (dermal, rabbit) -> 2000 mg/kg; LC50 (inhalation, rat, 4 h) - 7630 mg/m ³ Toluene: LD50 (oral, male rat) –5580 mg/kg; LC50 (inhalation, rat, 4 h) - 850 mg/m ³ ; LD50 (dermal, rabbit) - 5000 mg/kg Tetraethyl lead: LC50 (inhalation, rat, 4 h) > 5280 mg m ³ ; LD50 (oral, rat) – 14,8 mg/kg. LD50 (dermal, rabbit)> 2000 mg/kg.
Respiratory or skin sensitization	Has an irritating effect on the skin
Mutagenicity	No information
Carcinogenicit	No information
Reproductive toxicity	It is assumed that this substance may be detrimental to the unborn child. May cause drowsiness or dizziness.

Specific target organ toxicity - single exposure

May cause organ damage through prolonged or repeated exposure.

Specific target organ toxicity - repeated exposure

No information

Aspiration hazard

The permanent contact of the skin with gasoline can cause acute inflammation and chronic eczema.

12. ECOLOGICAL INFORMATION

Aquatic microorganisms

Toxicity indicators are given by components

High-octane gasoline component:

LC50 (Oncorhynchus mykiss, 96h) – 8,2 mg/l

EC50 (Daphnia magna, 48h) – 4,5 mg/l

EC50 (Pseudokirchneriella subcapitata, 72 h) – 3,1 mg/l

Toluene:

LC50 (Oncorhynchus mykiss, 96 h) – 5,5 mg/l

EC50 (Daphnia magna, 48 h) – 3,78 mg/l

Tetraethyl lead:

LC50 (Pleuronectes platessa, 96 h) – 0,230 mg/l

LC50 (Crangon crangon, 96 h) – 0,027 mg/l

Persistence and degradability

Toluene, which is part of the product, is rapidly degradable.

Bioaccumulative potential

Product exhibits bioaccumulation

Soil mobility

Not soluble in water. The product is not very mobile in soil.

Other side effects

No other adverse environmental effects (e.g. ozone depletion, endocrine disruption, global warming potential) are expected from this component.

13. WASTE MANAGEMENT

Exclude aviation gasoline from entering domestic, industrial, and storm sewer systems. Recovery or neutralization of waste products should be carried out in accordance with sanitary and epidemiological rules and regulations.

14. TRANSPORT INFORMATION

14.1 Number UN

1203

14.2 Proper shipping and transport names

Proper shipping name:

GASOLINE MOTOR or GASOLINE or PETROL

Shipping name:

Aviation gasoline Avgas 100LL

14.3 Types of transport risks

International Civil Aviation

Organization/International Air Transport Association

(ICAO / IATA)

Danger / Class / Division

3

Environmental hazards

Absent

Signs

3

International Maritime Dangerous Goods Code (IMDG)code

Danger / Class / Division

3

Danger to the aquatic environment

Absents

Signs

3

The Intergovernmental Organisation for International Carriage by Rail(MKMPOG) /European agreement concerning the transport of dangerous goods (DOPOG)

Danger / Class / Division

3

Signs

3

Code

F1

14.4 Group packing

II

14.5 Environmental risks

Hazardous to the environment.

14.6 Environmental risks with the app. II to the International Convention for the prevention of pollution from ships (MARPOL) 73/78 and International Code for the Construction and Equipment of Ships, Carriers Dangerous Chemicals in Bulk (MRG)

Does not concern.

14.7 Special precautions

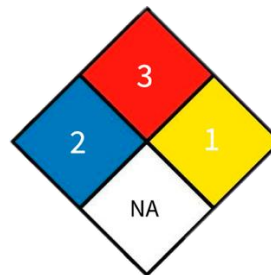
Wear personal protective equipment during loading and unloading

15. REGULATORY INFORMATION

HMIS

HEALTH	2
FLAMMABILITY	3
PHYSICAL HAZARD	1
PERSONAL PROTECTION	

NFPA



REACH

GHS

MDGC

ICAO/IATA

Application II MARPOL 73/78

RID

ADR

16. ADDITIONAL INFORMATION

We believe that the information contained herein is current as of the date of this material safety data Sheet and is offered in good faith. Since the use of this information and these opinions and terms of use of the product are not under control LLC «Ecotechnokhim» the user's obligation to determine the conditions for safe use of the product.

Collected information:

LLC «Ecotechnokhim»

Current date:

17.09.2019

Disclaimer:

The information provided in this Material Safety Data Sheet is based on data that is believed to be accurate as of the preparation date of this Material Safety Data Sheet. No liability is accepted for any damage or

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Print location


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