



BIXBIT

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

"Coolant" heat transfer agent for immersion cooling

Date of issue:
03.05.2019

Version: 1.0

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

Product name: "Coolant" heat transfer agent for immersion cooling.

Synonyms/trade name: none.

1.2 Relevant identified uses of the substance: the substance is used as a dielectric heat transfer agent to cool computing equipment.

1.3 Details of the supplier: Bixbit Limited Liability Company

Address: **117 pr. Nezavisimosti, room 8, Minsk 220114, Republic of Belarus**

Telephone: tel.: +375 (29) 754-19-66

1.4 Emergency telephone number: +375 (29) 754-19-66

2. HAZARDS/RISKS IDENTIFICATION

2.1 Classification of the substance or mixture:

According to Regulation EC No. 1272/2008 the product is not qualified as dangerous.

2.2. Label elements:

Signal word: NA.

Pictogram: NA.

2.3 Hazards for human health:

Hazard class 4 (low-hazard substances).

In the course of general use it does not have an acute or chronic harmful effect on human health, nor irritates the skin, eye contact results in eye irritation. If ingested, it has a weak stimulating effect on the small intestine peristalsis.

The maximum permissible concentration of the heat transfer agent hydrocarbon vapors in the working area air - 900/300 mg/m³.

2.4 Other risks: none.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Oil distillate.

CAS No.: none.

EC No: none.

Classification according to Regulation (EC) No. 1272/2008/EC: Not classified

4. FIRST AID MEASURES

4.1 Description of first aid measures

No special measures required. In case of health problems or if in doubt, consult doctor.

4.2 Inhalation:

Inhalation does not have any effect of the heat transfer agent.

4.3 Eye contact:

In case of eye contact, rinse with plenty of running water.

4.4 Skin contact:

In case of skin contact, rinse with plenty of warm water.

4.5 Ingestion:

If ingested, **use plenty of drink, activated carbon, salt laxative**, do not induce vomiting. Get medical attention if you feel unwell.



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5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Foam, water spray, sand, felting.

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Fight fire from reasonable distance with normal safety precautions.

5.4 Protective fire-fighting equipment

Full protective clothing and self-contained breathing apparatus.

5.5 Additional information

Total flooding: carbon dioxide, liquid bromoethyl agent, superheated steam.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid eye contact.

Avoid swallowing.

Avoid eye contact, inhalation of fumes of the burning heat transfer agent.

6.2 Environmental precautions

No special measures required.

Avoid large quantities of heat transfer agent entering surface and ground waters.

Equipment and devices sealing is necessary to eliminate the ingress of heat transfer agent hydrocarbon vapors into production facility air.

The room used for working with the heat transfer agent must be fitted with supply and exhaust ventilation.

6.3 Methods and material for containment and cleaning up

At heat transfer agent spillage it must be collected into a separate container, the spill area must be washed with kerosene and wiped with a dry cloth; at outdoors spilling the spill area must be covered with sand and then removed.

6.4 Reference to other sections

See Section 8 for personal protective equipment and Section 13 for disposal recommendations.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Measures should be taken to ensure good ventilation.

Eating, drinking, smoking is prohibited during work.

7.2 Conditions for safe storage, including any incompatibilities

No open flames is allowed in premise for heat transfer agent storage and operation; artificial lighting must be explosion-proof. When opening the package, do not use tools producing sparks at impact.

7.3 Specific end use(s)

No information available at present

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Control of maximum allowable concentrations of substances in the air of the working area.

8.2 Exposure Controls



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8.2.1 Appropriate engineering controls. Ventilation and air extraction of industrial and warehouse premises.

8.2.2 Individual protection equipment for workers:

Eye protection: - safety goggles (if necessary)

Upper respiratory tract protection: - breathing apparatus; insulated breathing apparatus in case of fire

Skin protection: - working garments.

Foot protection: - closed, non-slip shoes.

Hand protection: - safety gloves made of textile (if necessary).

General protective and hygienic measures: observe general precautions.

8.2.3 Environmental exposure controls:

Do not allow large quantities of the product to enter drains or water bodies.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Colorless oily transparent non-fluorescent liquid without odor
Solubility	Almost insoluble in water and 95% alcohol; soluble in ether, chloroform, gasoline, mixed with vegetable oils, except for castor, in all ratios
Density at 15 °C, kg/m ³	835,5 ± 0,4
Solidification temperature, not higher than, °C	Minus 18
Kinematic viscosity at 20 °C, mm ² /s	47,32 ± 0,26
Kinematic viscosity at 40 °C, mm ² /s	10,77 ± 0,06
Water and paraffin content	Weak opalescence is allowed
Organic impurities	The heat transfer agent must remain colorless. The sulfuric acid layer can have a dark yellow colour or a brownish tint
Acidity and alkalinity	Adding not more than 0.05 ml of 0.1 M sodium hydroxide solution must result in pink coloring
Polycyclic aromatic hydrocarbons. Quantitative determination	Must not exceed 1/3 of absorption
Sulfides	The mixture should not darken
Low-boiling compounds	Should not distill more than 0.2 ml
Reducing substances	The color of potassium permanganate solution must not disappear
Residue after calcination, % max	0,01
Microbiological purity	State Pharmacopoeia, X1, 3rd ed. Cat. 1.2B
Flash point in close-cup, °C	202 ± 6
Flash point in open-cup, °C	228 ± 11
Breakdown voltage, kV	59,1
Volatile low-molecular acids content, mg KOH/g	0,002
Oxidized heat transfer agent acid number, mg KOH/g	0,013
Sediments content, %	No sediment
Dielectric loss tangent at 90 °C, %	0,01



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10. STABILITY AND REACTIVITY	
10.1 Reactivity The heat transfer agent is stable during the warranty period. Flammable liquid. Does not have the ability to form toxic compounds in air and wastewater under the influence of other chemicals or physical factors at ambient temperature. Does not oxidize.	
10.2 Chemical stability The product is stable at normal temperature and pressure.	
10.3 Hazardous decomposition products No decomposition occur at intended use.	
10.4 Conditions to avoid Avoid materials that cause ignition and combustion.	
11. TOXICOLOGICAL INFORMATION	
Not classified as hazardous product	
Potential effects on the organism	
Eye contact: - none.	
Inhalation: - none.	
Skin contact: - none.	
12. ECOLOGICAL INFORMATION	
Not classified as hazardous substance. Not a source of toxic emissions into environment. Bioaccumulation potential: no data. Mobility in soil: no data. Biodegradability: no data.	
13. WASTES (RESIDUES) TREATMENT METHODS	
Disposal or destruction of technological losses, waste generated during production, as well as waste after its use to be performed as prescribed by regional authorities.	
14. TRANSPORT INFORMATION	
In accordance with ADR / RID / IMDG / IATA / ADN	
14.1. UN number ADR / RID / IMDG / IATA / ADN	Not regulated
14.2. UN proper shipping name ADR / RID / IMDG / IATA / ADN	Not regulated
14.3. Transport hazard class(es) ADR / RID / IMDG / IATA / ADN	Not regulated
14.4. Packing group ADR / RID / IMDG / IATA / ADN	Not regulated
14.5. Environmental hazards ADR / RID / IMDG / IATA / ADN	Not regulated



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14.6. Special precautions for user

Overland transport	Not regulated
Transport by sea	Not regulated
Air transport	Not regulated
Inland waterway transport	Not regulated
Rail transport	Not regulated

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable

15. REGULATORY INFORMATION

Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006;
Regulation (EC) No. 1907/2006 of 18 December 2006 concerning the registration, evaluation, authorization and restriction of Chemicals (REACH);
GOST 14192-96 Cargoes labeling.

16. OTHER INFORMATION

This safety data sheet has been developed for the first time.
Developer: Belpromstandard Private Enterprise.