OKPD2 20.14.71.181 OKS 71.080

BIRCH TAR
Technical specifications
TU 20.14.71-001-0124077269-2021
(entered for the first time)

rOmsk
2021.

Content

1 SCOPE OF APPLICATION

These technical conditions apply to birch tar (hereinafter referred to as"tar").

Tar is used as a natural raw material additive in the production of cosmetics. When choosing other (additional) areas and conditions of use, it is necessary to take into account the requirements of these technical specifications.

These technical specifications are developed in accordance with the requirements of GOST R 1.3.

Example of the designation when ordering:

"Birch tar. TU 20.14.71-001-0124077269-2021"

The list of documents referred to in these technical specifications is given in Appendix A.

2 TECHNICAL REQUIREMENTS

2.1 Main parameters and characteristics.

2.1.1 Tar must meet the requirements of these technical specifications and be produced using the manufacturer's technical documents.

2.2 Technical data.

2.2.1 In terms of basic physical and chemical characteristics, it must comply with the standards given in Table 1.

Table 1-Physical and chemical characteristics

Parameter	Value
Appearance: physical condition color smell	 oily liquid black with a bluish-greenish or greenish-blue tint petroleum, non-sharp
Density at 20 °° C, g /^{cm3}	0.925-0.950
Acid number, mg	15-25
Saponification number, mg	36-60
Ether number, mg no more	than 45
Moisture content, % no more	0.5
poddegtyarny water content, % not more	than 1
Viscosity, kc	20-100
Flash point, °C	plus 158
Auto-ignition temperature, °C	plus 320

2.3 The presence of foreign impurities (tar, oil, mineral oils)is not allowed in the tar and the release of sediment during settling.

2.4 Tar is produced from birch bark.

3 SAFETY REQUIREMENTS

3.1 In terms of sanitary-chemical and toxicological safety indicators, tar meets the " Unified sanitary-epidemiological and Hygienic Requirements for Goods Subject to sanitary-epidemiological supervision (control)", approved by the Decision of the CU Commission No. 299 of May 28, 2010 (as amended on September 8, 2020).

3.2 Tar according to the degree of exposure to the human body is a low-hazard product, belongs to substances of hazard class IV in accordance with GOST 12.1.007. It has a weakly irritating effect on the mucous membranes of the eyes, does not have cumulative properties.

3.3 No special measures are required in preparation for disposal and during disposal.

4 PACKAGING AND LABELING

4.1 As consumer packaging, bottles with a capacity of 50, 100, 500 ml and 1 l according to GOST 34037, cans of 5, 10 and 20 liters according to GOST 5105 and/or other containers (corresponding to regulatory documentation) can be used by agreement with the consumer.

4.1.1 Each tar unit with tar is equipped with instructions for use.

4.2 Marking data on consumer packaging must contain:

- name of the manufacturing company or its trademark;
- name;
- net weight.
- date of manufacture.
- guaranteed storage period;
- designation of regulatory and technical documentation;
- precautionary measures;
- method of application.

4.2.1 Consumer packaging must be labelled. Labels should be pasted firmly, without distortions and wrinkles.

4.2.2 Labels should be attached to consumer containers with any adhesive according to the regulatory and technical documentation. It is allowed to use self-adhesive labels.

4.2.3 Transport marking - according to GOST 14192.

5 ACCEPTANCE RULES

5.1 Tar must be accepted by the technical control of the manufacturer. Tar is taken in batches. For a batch of tar, the amount of tar produced from one type of raw material and packed in the same consumer container is taken.

5.2 During acceptance tests of tar, determine the appearance, packaging and labeling, density, acid number, saponification number, ether number, the presence of moisture, the content of sub-tar water.

5.3 A batch of tar is accepted if the results of acceptance tests for all indicators meet the requirements of these technical conditions, as well as the requirements of a regulatory or technical document.

The batch is rejected if the tar does not meet the requirements of these technical conditions, regulations or technical documents for at least one indicator.

5.4 During periodic tests, determine: viscosity, ignition temperature and auto-ignition-within the time limits agreed with the consumer, but at least once a month;

The results of periodic tests apply to all shipments of tar delivered until the next periodic tests are carried out.

6 CONTROL METHODS

6.1 Visual inspection of appearance, packaging and labeling is performed.

6.2 Determination of the acid number according to GOST 17823.1

6.3 Determination of saponification number according to GOST 5478.

6.4 Determination of the ether number according to GOST 30144.

6.5 Determination of water according to GOST 16399

6.6 Density is determined using a hydrometer according to GOST 18481. Tar is poured into a glass cylinder with a diameter of 4-5 cm and a height of 30-40 cm and a hydrometer is lowered into it slowly and carefully. The hydrometer is marked with a scale with divisions in the upward direction: 1000; 0.950; 0.900; 0.850, etc., showing the density of the test tar depending on the degree of immersion of the hydrometer in tar. Hydrometer readings are counted 2-3 minutes after its immersion in tar. When counting, it is necessary to ensure that the observer's eyes are at the same level with the surface of the liquid in the cylinder. The density of tar is determined by the number on the hydrometer, which falls against the level of tar. In water, the hydrometer floats so that the water level falls against the division-1000, the lighter the liquid, the deeper the densimeter sinks into it. Measurement of tar density in accordance with the requirements of technical specifications is performed at a temperature of 20° C, to which the tar sample is brought by immersing the cylinder in cold or hot water, depending on the initial temperature of the tar sample.

6.7 The presence of impurities in tar is determined by the solubility of tar in 98% acetone. One volume of tar is shaken with five volumes of acetone. If there are

impurities in the tar, the mixture will not be transparent due to the poor solubility of impurities in acetone. Pure tar, dissolving in acetone, gives a clear solution, colored in the color of tar.

6.8 Determination of viscosity, flash point and auto-ignition, and the presence of moisture is determined in laboratories accredited for testing.

7 TRANSPORTATION AND STORAGE RULES

7.1 Tar is transported by all types of transport, vehicles, in accordance with the rules of cargo transportation applicable to this type of transport.

7.2 Tar transportation is carried out when forming boxes made of corrugated cardboard according to GOST 9142 with primary packaging in the form of vials or cans. It is allowed to use reinforced packaging on pallets with walls and a lid, with the use of fastening means.

7.3 During transportation, storage conditions should be observed that exclude exposure to direct sunlight, precipitation at temperatures from minus 10 °C to plus 45 °C.

7.4 Store in tightly sealed manufacturer's packaging, away from heating and heating devices at temperatures from minus 10 °C to plus 45 °C. Avoid exposure to direct sunlight and precipitation.

7.5 Store separately from food, out of the reach of children and animals.

7.6 Tar does not lose its properties during defrosting.

8 MANUFACTURER'S WARRANTIES

8.1 The manufacturer guarantees that the tar meets the requirements of these technical specifications, provided that the consumer complies with the storage and transportation conditions established by these technical specifications and operational documentation.

8.2 Warranty - 5 years from the date of manufacture.

ПAPPENDIX A. List of documents referred to in these technical specifications

(reference)

Designation Document	designation Document
name GOST R 1.3-2018	Standardization in the Russian Federation. Technical specifications for products. General requirements for the content, design, designation and updating
of GOST 12.1.007-76	System of Occupational Safety Standards (SSBT). Harmful substances. Classification and general safety requirements
GOST 34037-2016	Glass packaging for chemical reagents and high-purity chemicals. General technical conditions
GOST	5105-82 Steel canisters for fuel and oils. Technical specifications
GOST 14192-96	Cargo marking
GOST 17823.1-72	Forest chemical products. Method for determining the acid number
GOST	5478-2014 Vegetable oils and natural fatty acids. Method for determining the saponification number
GOST	30144-94 Essential oils and products of essential oil production. Method for determining the ether number
GOST	16399-70 Forest chemical products. Methods of water determination
GOST 18481-81	Hydrometers and glass cylinders. General technical conditions
GOST	9142-2014 Corrugated cardboard boxes. General technical conditions

LIST OF REGISTRATION OF CHANGES TO THESE TECHNICAL CONDITIONS

Change	number Page				numbers Total pages after making the change	№ Document number	Information about the receipt of the change (cover letter number)	Signature of the person who made the changes	Surname of the person who made the changes and date of making the changes
	replaced	additional	excluded	changed					