According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 1 of 9

Section 1: Products and manufacturer identification

1.1 Products identification

Name: Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Trade name: «ANTIBITUM»

1.2 Types of use of chemical products and non-recommended or prohibited uses

Product removes oil products, bitumen stains, traces of rubber and glue. Safe for paintwork. Do not apply to the tread surface.

1.3 Manufacturer / supplier company identification

Limited liability company "Joint German-Ukrainian Enterprise "DrakenBerg"

Code: 42281913, Ukraine, 29016, Khmelnytskyi region, Khmelnytskyi, Yurii Kozlovsky Street, 7/1.

tel.: +380671111421 director Kushal Denys Viktorovych;

e-mail: export.drakenberg@gmail.com; web: drakenberg.com.ua

1.4 Emergency phone numbers

101 (Ukraine)

+380971445330 technologist Kravets Ihor Petrovych

Section 2: Hazard identification

2.1 Mixture classification

Aspiration hazard 1, H304

2.2 Marking elements

Hazard pictograms:



GHS08

Signal word: DANGER **Indication of hazards:**

H304: Lethal if swallowed and further ingested by the respiratory tract

Precautionary statements:

P210 Keep away from heat, sparks, open flames, hot surfaces. SMOKING IS PROHIBITED

P233 Store container tightly closed

P243 Take precautions against electrostatic discharges

P260 Do not inhale vapors

P262 Avoid contact with eyes, skin and clothing

P280 Wear protective gloves

P301 + P310 IN CASE OF SWALLOWING: Seek first aid from a doctor

P331 DO NOT cause vomiting

P403 Store in a well-ventilated place

P405 Store locked up

P501 Dispose of contents/container to national law

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 2 of 9

Additional Information:

EUH210 -Safety data sheet of chemical products can be obtained upon request.

EUH401 - Follow the instructions for safe use to avoid risks to human health and the environment.

2.3 Other dangers:

Compliance with PBT and vPvB criteria - does not meet PBT and vPvB criteria.

Does not contain destroyers of the endocrine system, in the amount of ≥ 0,1 %

Does not contain substances in nanoforms in accordance with the Regulation (EC) No 2020/878.

Section 3: Composition / information about components

3.1 Substance:

Not applicable

3.2 Mixture:

Hazardous components are listed below

Chemical name (IUPAC)	EC#	CAS#	Concent- ration, %	Classification (CLP/GHS)	Reach reg #
Distillates (petroleum), hydrotreated light	265- 149-8	64742- 47-8	до 100	Aspiration hazard 1, H304	

For a full decoding of H-phrases, see Section 16.

Section 4: First aid measures

4.1 Description of first aid measures

<u>In case of inhalation</u>: provide the victim with access to fresh air, rest. For those providing care, avoid exposure to yourself or others. Use appropriate respiratory protection. If the victim experiences respiratory irritation, nausea, or loss of consciousness, seek medical attention immediately. If breathing has stopped, use a mechanical ventilator or mouth-to-mouth resuscitation to help.

<u>In case of skin contact</u>: remove contaminated clothing, wash the skin with plenty of soap and water. If irritation persists, consult a dermatologist. Wash clothes before reuse.

<u>In case of contact with eyes</u>: rinse eyes thoroughly with plenty of water; remove contact lenses if present, and continue rinsing for 10-15 minutes. If irritation persists, consult an ophthalmologist.

<u>In case of swallowing</u>: rinse mouth with water. Do not give the victim anything in the mouth. Do not induce vomiting. If vomiting starts unexpectedly, keep the head below the hips to prevent aspiration. Get medical attention immediately and show the label of this container.

4.2 The most important acute and delayed symptoms and consequences

<u>In case of inhalation</u>: may cause drowsiness and dizziness, irritation of the respiratory tract, sore throat, difficulty breathing, headaches.

In case of skin contact: repeated exposure may cause dry and cracked skin. Skin redness, irritation.

In case of eye contact: irritation, redness of the eyes, lacrimation.

If swallowed: may cause lung damage if swallowed. Nausea, weakness, loss of consciousness.

4.3 Instructions on the need for first aid

If swallowed, the material may enter the lungs by inhalation and cause chemical pneumonia. Take appropriate treatment.

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 3 of 9

Section 5: Fire safety measures

5.1 Fire extinguishing means

<u>Combustible properties</u>: combustible substance. Hazardous material. Vapours may form explosive mixtures with air. Flash point > 61°C.

Appropriate extinguishing agents: Apply fire extinguishing measures according to the environmental conditions. Spray water, carbon dioxide (CO_2) , dry chemical mixtures.

Unsuitable extinguishing media: Do not use a direct water jet on burning materials.

5.2 Special hazards that may be caused by the substance

Hazardous combustion products: smoke, gas, carbon oxides, products of incomplete combustion.

<u>Special protective equipment for firefighters</u>: Use the full set of protective clothing and breathing apparatus required for the specific fire area.

5.3 Recommendations for firefighters

Evacuate people from the area. When extinguishing a fire or diluting contaminants, do not allow wastewater to enter water supplies, sewers, or drinking water sources. Firefighters should use standard protective equipment and self-contained personal breathing apparatus (SCBA) in confined spaces. Use filters for organic vapors. Use spray water to cool surfaces exposed to fire and to protect personnel. Dispose of contaminated water after extinguishing the fire in accordance with national regulations. Extinguish the fire from a sufficient distance using standard precautions.

Section 6: Measures to eliminate emergency release

6.1 Personal safety measures, protective equipment and procedure for emergency situations

6.1.1 For general staff

Avoid contact with spilled material. Warn or evacuate adjacent and downwind areas if necessary due to toxicity and flammability of the material. Do not touch or step on spilled material.

All sources of ignition must be eliminated (smoking, torches, sparks or open flames are prohibited in the immediate vicinity). All equipment for working with the product must be grounded.

Prevent penetration into water lines, sewage systems, basements or confined spaces. Vapor suppressant foam may be used to reduce vaporization. Use clean, non-sparking equipment to collect the adsorbent. Cover with dry earth, sand or other non-combustible absorbent material and load into containers.

6.1.2 For emergency response personnel

Respiratory protection: Depending on the extent of the leak and potential exposure, respirators, gas masks with filters to protect against organic vapors and, where appropriate, H_2S , or self-contained breathing apparatus (SCBA) may be used. If exposure cannot be fully assessed, or if an oxygen-deficient atmosphere is suspected, SCBAs are recommended. Aromatic hydrocarbon resistant gloves are recommended. Note: Polyvinyl acetate (PVA) gloves do not protect against water and are not suitable for use in an accident. If there is a possibility of splashing or eye contact, chemical goggles are recommended.

Stop or contain the leak at the source if it is safe to do so. Evacuate personnel to a safe area. Restrict access to the spill area until cleanup is complete. Repair the leak if it can be done safely. Eliminate all sources of ignition. Ensure that cleanup is carried out by qualified personnel only.

<u>Minor spills</u>: normal antistatic clothing is usually sufficient. Cover with an absorbent (vermiculite, sand, earth), collect in a container for further disposal.

Large spills: a full set of protective equipment made of antistatic material is recommended.

Spillage on the ground: Enclose spills with an earthen berm. Spraying water may reduce vaporization but will not prevent ignition in a confined space. Collect with a pump or suitable absorbent. Place in a container and take for disposal. Dispose of the product in accordance with the rules specified in section 13.

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 4 of 9

Spilled into water: Stop leakage if there is no risk involved. Remove from surface or remove with suitable sorbents. Consult a specialist before using dispersants.

6.2 Measures to ensure environmental protection

Make bunds at a considerable distance from the spilled liquid for subsequent collection and disposal. Do not allow the product to enter sewers, rivers, waterways, and other bodies of water or soil. Stop further leakage or spillage if it is safe to do so. Save the flushing water and dispose of it.

6.3 Methods and materials for cleaning and neutralization

Covering of sewage. Absorbent non-combustible material, water. Place in containers for disposal. Ventilate the affected area.

6.4 References to other sections

See Section 8 for information on personal safety precautions.

See Section 13 for information on waste disposal.

Section 7: Handling and storage

7.1 Precautions for safe handling

Use only for the intended purpose. Do not apply to the tread surface. Use at air temperature from $+10^{\circ}$ C to $+30^{\circ}$ C.

Wear rubber gloves when handling the product and avoid contact with eyes. Avoid contact with skin. Avoid minor spills and leaks to avoid the risk of slippery spots. The material may accumulate static charges that can cause electrical sparks (ignition sources). Use appropriate bonding and grounding operations. However, bonding and grounding does not guarantee that static electricity will not build up. Check the relevant local standards.

<u>Fire prevention</u>: Keep away from heat sources, sparks, and open flames.

7.2 Conditions for safe storage, including any incompatibilities

Store at a temperature of +5°C to +30°C and relative humidity up to 80% at a distance of at least 1 m from heating devices in a well-ventilated place. Store only in the manufacturer's container, separately from food and drinking water, animal feed. Keep the container tightly closed. Open the container slowly to control possible pressure release. The guaranteed shelf life is 24 months from the date of manufacture under the conditions of storage.

<u>Material incompatibility:</u> for containers - natural rubber, butyl rubber, polystyrene, ethylene-propylene-diene monomer (EPDM).

<u>Recommended packaging materials</u>: carbon steel, stainless steel, teflon, polyethylene, polypropylene. <u>Hazardous decomposition products</u>: carbon oxides during thermal decomposition.

7.3 Specific end uses

No data available.

Section 8: Hazardous exposure controls and personal protective equipment

8.1 Control parameters

No monitoring parameters are set for the air in the work area.

Distillates (petroleum), hydrotreated light (vapor): exposure limits (non-additive) = 1200 mg/m³.

8.2 Impact control

8.2.1 Appropriate technical control

The level of protection and the types of control measures required will depend on the potential exposure conditions. Adequate ventilation must be provided to prevent exceeding the permissible exposure limits. Use explosion-proof ventilation equipment.

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 5 of 9

8.2.2 Personal protective equipment

Respiratory protection: in case of intensive or prolonged contact with the substance, in case of insufficient ventilation, use respiratory protection equipment in accordance with European standards EN 133, EN 136, EN 140, EN 143. Use organic vapor filters. Respiratory protection is not necessary in case of sufficient ventilation or short-term use.

Eye protection: Avoid contact with eyes. In case of possible contact, it is recommended to wear protective goggles with side shields.

Skin protection:

<u>Hand protection</u>: Any specific information regarding gloves is based on publications and data from the glove manufacturer. The suitability and service life of gloves will depend on the conditions of use. Please contact the glove manufacturer for advice on glove selection and shelf life for your application. Inspect and replace gloves if they are worn or damaged. Chemical resistant gloves are recommended. Nitrile rubber with a minimum thickness of 0.38 mm or a compatible protective barrier material with high performance and impregnation rate for continuous contact under conditions of use for at least 480 minutes in accordance with CEN EN 420 and EN 374.

Body protection: Chemical/oil resistant clothing is recommended.

Section 9: Physico-chemical properties

9.1 Information on basic physicochemical properties

State: homogeneous transparent colorless or yellow liquid

Smell: specific raw material or flavors used

Threshold of smell: not defined not applicable Melting/freezing point: no data available

Boiling point or temperature range: 165°C

Flash point: >61°C (in a closed crucible)

Intensity of evaporation: no data available Flammability indicators: flammable liquid

Upper and/or lower ignition limits

or explosiveness: lower explosion hazard limit 0,6

upper explosion hazard limit 7,0

Vapour pressure: no data available Vapour density: no data available

Relative density: 0.8-0.85 g/cm³, at a temperature of (20±1)°C

Solubility in water: insoluble Solubility in organic solvents: dissolves

The n-octanol/water partition coefficient: no data available

Auto-ignition temperature: > 200°C

Decomposition temperature: > 120°C

Viscosity: 0.7 mPa/sec

Explosive properties: no data available

Oxidizing properties: non-oxidizer

9.2 Other information:

Currently, there is no additional data from available sources.

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 6 of 9

Section 10: Stability and reactivity

10.1 Reactivity

According to section 10.3.

10.2 Chemical stability

The product is stable under the conditions of storage and transportation.

10.3 The possibility of dangerous reactions

There is no dangerous polymerization.

10.4 Conditions to avoid

Avoid exposure to heat, flames, sparks and other sources of ignition.

10.5 Incompatible materials:

Strong oxidizing agents.

10.6 Hazardous decomposition products:

The product does not decompose at ambient temperatures.

Section 11: Toxicological information

11.1 Information on toxicological effects

Mixture:

Aspiration hazard 1

Mutagenicity: no product studies have been conducted; Not expected to be a germ cell

mutagen. Based on test data for structurally similar materials.

<u>Carcinogenicity:</u> no product studies have been conducted; Naphtha (petroleum)

hydrotreated heavy may exhibit a 1B carcinogenic effect.

<u>Reproductive toxicity:</u> no product studies have been conducted; Not expected to be a reproductive

toxicant. Based on test data for structurally similar materials.

Chronic toxicity: not detected

Teratogenicity: no teratogenic effects were detected

Cumulative effect: poor

Specific effects on target organs: not detected

Causes skin irritation and may cause drowsiness or dizziness. Distillates (petroleum), hydrotreated light (CAS 64742-47-8):

Acute inhalation toxicity: LC_{50} (rats) > 5000 mg/m³ (based on test data for structurally similar materials)

Acute oral toxicity: LD_{50} (rats) > 5000 mg/kg (based on test data for structurally similar materials)

Acute dermal toxicity: LD_{50} (rabbits, 4 hours) > 5000 mg/kg (based on test data for structurally similar materials).

May dry skin, causing discomfort and dermatitis. Mildly irritating to the skin with prolonged exposure.

Eyes: May cause mild short-term eye discomfort.

Chronic toxicity:

Vapor concentration above the recommended exposure level causes irritation of the eyes and respiratory tract, may cause headache and dizziness; is an anesthetic agent, and may also cause other effects on the central nervous system. Prolonged and/or repeated skin contact may degrease the skin, resulting in irritation and dermatitis. Small amounts of fluid entering the lungs through ingestion or vomiting may cause chemical pneumonic or pulmonary edema.

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 7 of 9

Section 12: Information on environmental impact

12.1 Toxicity to the environment

Toxicity to aquatic organisms:

No harmful effects on aquatic organisms are expected.

Chronic toxicity to aquatic organisms is not expected.

Distillates (petroleum), hydrotreated light (CAS 64742-47-8):

Acute toxicity to fish: $LL_0 = 1000 \text{ mg/l}$ (96 hours, Oncorhynchus mykiss)

Acute toxicity to Daphnia: $EL_0 = 1000 \text{ mg/I}$ (Daphnia magna, 48 hours).

Acute toxicity to algae: $EL_0 = 1000 \text{ mg/l}$ (72 hours, Pseudokirchneriella subcapitata)

Toxicity to terrestrial organisms: No product information is available.

12.2 Stability and ability to decompose

The product is biodegradable.

Distillates (petroleum), hydrotreated light (CAS 64742-47-8):

Highly volatile, will rapidly pass into the air. It is not expected to separate into sludge and solids remaining in wastewater.

Biodegradation: Rapid biodegradation is expected.

Hydrolysis: No significant transformation of the product is expected as a result of its hydrolysis.

Photolysis: No significant transformation of the product is expected as a result of its photolysis.

Atmospheric oxidation: Rapid decomposition in air is expected.

Fully biodegradable in water (80% in 28 days).

12.3 Bioaccumulative potential

Not expected.

12.4 Mobility in soil

No negative impact is expected.

12.5 PBT and vPvB assessment results

The product does not meet PBT and vPvB criteria.

12.6 Other adverse effects

Not known.

Section 13: Waste disposal information

13.1 Waste management methods

Dispose of in accordance with local regulations. According to the European Industrial Waste Catalogue, the rules and regulations for waste disposal are not defined for the product, but for the type of use. Waste disposal rules and regulations should be established by the consumer, preferably with the mutual consent of the industrial waste disposal authority.

<u>Product:</u> Any residual product that cannot be used for its intended purpose is sent for disposal to a recycling facility licensed by the Ministry of Environmental Protection of Ukraine to carry out this type of work. Spilled product is collected using an absorbent material in a separate container. Prevent product from being discharged into sewers and water sources. State act of Ukraine - the Law of Ukraine «On Waste Management». The product can be burned in closed controlled incinerators as fuel or eliminated by controlled combustion at very high temperatures to prevent the formation of undesirable combustion products.

<u>Contaminated packaging:</u> Empty containers may contain product residues and be hazardous. Containers and product residues are destroyed or recycled in accordance with the requirements of applicable state legislation. DO NOT press, DO NOT cut, DO NOT grind, DO NOT solder, or braze product containers, DO NOT use near

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 8 of 9

sources of heat or flame, sparks, static electricity, or other sources of ignition. They may explode, causing injury or death.

<u>Waste disposal code:</u> Spoiled or used solvents, their residues that cannot be used for their intended purpose 7710.3.1.20 (Ukraine).

European waste code 08 xx xx.

Observe the safety precautions in accordance with the Section 8.

Section 14: Transportation information

The product is transported by road (ADR), rail (RID)

14.1 UN number: 1268

14.2 Proper transport name: petroleum distillates, n.o.s.

14.3 Transport hazard class: 3

14.4 Packing group: III

14.5 Dangers to the environment

The mixture is not classified as hazardous to the aquatic environment.

See Section 12 for additional information.

14.6 Special precautions for the user

General measures for safe transportation must be observed.

14.7 Transportation in bulk in accordance with Annex II to MARPOL 73/78 and the MSC Code

Not applicable.

Section 15: Regulatory information

15.1 Normative and legal acts on ensuring protection of human health and the environment

Health, safety and environmental regulations/laws applicable to the mixture or substances.

EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV - List of substances subject to authorization.

Substances of Very High Concern - none of the components are listed.

Annex XVII - Restrictions on the production, placing on the market and use of certain hazardous substances, mixtures and products: not available.

Regulations/laws on labor and safety, and environmental protection, and industrial safety that apply to this product. The Law of Ukraine «On Waste Management», «On Environmental Protection», the Law of Ukraine «On Withdrawal from Circulation, Processing, Recycling, Destruction or Further Use of Substandard and Hazardous Products», the Water Code of Ukraine, MOH of Ukraine Order No. 1596 of 14.07.2020 «About approval of hygienic regulations for the permissible content of chemical and biological substances in the air of the work area». It is necessary to take into account employment restrictions for adolescents. The Law of Ukraine «On Waste Management».

15.2 Chemical safety assessment:

Chemical safety assessment is not required

Section 16: Other information

Corresponding P-, H-, EUH-phrases:

H304: Lethal if swallowed and further ingested by the respiratory tract

Precautionary statements:

P210 Keep away from heat, sparks, open flames, hot surfaces. SMOKING IS PROHIBITED

P233 Store container tightly closed

According to the Regulation (EC) No 1907/2006, Regulation (EC) No 1272/2008 (CLP), DSTU GOST 30333:2009

Polychrom 2020 Bitumen stain remover «ANTIBITUM»

Date: 22.06.2023 Version: 1.0 Supersedes the version: - Page 9 of 9

P243 Take precautions against electrostatic discharges

P260 Do not inhale vapors

P262 Avoid contact with eyes, skin and clothing

P280 Wear protective gloves

P301 + P310 IN CASE OF SWALLOWING: Seek first aid from a doctor

P331 DO NOT cause vomiting

P403 Store in a well-ventilated place

P405 Store locked up

P501 Dispose of contents/container to national law

EUH210 -Safety data sheet of chemical products can be obtained upon request.

EUH401 - Follow the instructions for safe use to avoid risks to human health and the environment.

Abbreviations and acronyms:

ADR The European agreement on the international carriage of dangerous goods by road RID The European Regulation on the International Carriage of Dangerous Goods by Rail

PBT Persistent bioaccumulative toxic substance

vPvB (very) Persistent, (very) Bioaccumulative and/or Toxic substance

CAS Chemical Abstracts Service

IUPAC international Union of Pure and Applied Chemistry (an international union of theoretical

and applied chemistry)
European Community

CLP Classification, Labelling and Packaging

REACH Registration, Evaluation and Authorisation of Chemicals

CL₅₀ Concentration causing death of 50% of experimental animals

LD₅₀ Average lethal dose

EL₀ effective loading level which causes 0% change in the state

LL₀ lethal loading level which causes 0% of deaths

Training instructions:

EC

During the production of the product, the staff should be regularly instructed on the protection and handling of hazardous substances.

Additional Information:

Packaging: 0.5 liters; 1 liter; 5 liters; 20 liters; filling on request.

The data contained in the safety data sheet is based on the amount of information and experience available to the manufacturer at the time. The consumer of the product is responsible for the consequences of its use for specific purposes. The information relates to this particular mixture. It may not be valid if this mixture is used in conjunction with any other materials or any other process.

Basic literature references and data sources:

Internal research reports

The Hazardous Substances Data Bank (HSDB)

ECHA database of registered substances

TU U 20.4-44243293-001:2021 Car care products. Technical specifications.