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Safety Data Sheet

1. Product and Company Identification

Material name: Birch Plywood

Product use: For general (including building) purposes.

Chemical description: Solid wood bonded with phenol-formaldehyde (PF) adhesive;

Solid wood bonded with urea-formaldehyde (UF) adhesive.

Manufacturer information: CJSC "Plywood plant 'Vlast Truda"

31 Pereulok Shirokiy, Nizhniy Lomov

Penza Region 442153, Russia

2. Hazards Identification

Emergency overview: Process of plywood sanding generates dust. Wood dust may ignite or form explosive mixture with air in the presence of an ignition source. Product dust may be irritating to eyes, skin or respiratory system.

Target organs: Eyes, skin and respiratory system.

Potential health effects:

Eyes: Dust or splinters may cause irritation or injury to the eyes.

Skin: Contact with skin may cause irritation.

Inhalation: Dust of this product may cause irritation to the nose, throat or respiratory tract.

Ingestion: Due to material form and application, ingestion is considered unlikely.

3. Composition / Information on Ingredients

Components: birch veneer and phenol-formaldehyde adhesive; birch veneer and urea-formaldehyde adhesive.

4. First Aid Measures

First aid procedures:

Eye contact: In case of contact, immediately flush eyes with large amount of water, continuing to flush for 15 minutes. Do not rub the eyes. Get medical attention immediately.

Skin contact: If irritation develops, wash with soap and water. Get medical attention if irritation persists.

Inhalation: Remove from area of exposure. If the effected person is not breathing, apply artificial respiration. If persistent irritation, severe coughing or breathing difficulty occurs, seek medical attention.

Ingestion: If wood or wood dust is swallowed, get immediate medical attention or advice – do not induce vomiting.



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General fire hazards: Wood is combustible when exposed to heat or flame. Wood dust may form explosive mixture with air in the presence of an ignition source. An airborne dust concentration of 40 g/m3 of air is often used as the lower explosion limit (LEL) for wood dust. Avoid prolonged breathing of wood dust or decomposition products.

Extinguishing media

Suitable extinguishing media: Use methods for the surrounding fire.

Protection of firefighters

Protective equipment and precautions for firefighters: firefighters should wear full protective clothing including self-contained breathing apparatus. Partially burned dust is especially hazardous if dispersed into the air. Wet down to reduce likelihood of ignition or dispersion. Remove burned or wet dust to open, secure area after fire is extinguished.

Explosion data:

Sensitivity to static discharge: Not available. Sensitivity to mechanical impact: Not available.

Hazardous combustion products: Hazardous decomposition products may include irritating fumes or gases including carbon monoxide, aldehydes or organic acids.

6. Accidental release measures

Personal precautions: Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Avoid inhalation of dust during clean-up.

Methods for cleaning up: Vacuum or wet sweep small wood pieces or dust; place an appropriate container for disposal. Gather lighter pieces by an appropriate method. Reduce airborne dust by use of wet methods and prevent scattering by moistening with water.

7. Handling and storage

Handling: Dust can form an explosive mixture in air. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Use personal protective equipment as required. Avoid frequent or prolonged inhalation of wood dust. Avoid contact with skin, eyes and clothing. Wash hands thoroughly after handling. Keep away from heat and sources of ignition. Keep formation of airborne dust to a minimum.

Plywood may release very small quantities of formaldehyde in gaseous form which cannot cause irritation. Minimum formaldehyde release of plywood produced by <u>CJSC "Plywood plant 'Vlast Truda"</u> is confirmed by The Entwicklungs- und Prüflabor Holztechnologie GmbH (EPH). The formaldehyde emission according to EPH reports is 0,1-0,3 mg/h x m² (limit value: 3,5 mg/h x m²). The formaldehyde emission according to CARB method of testing is 0,01-0,02 ppm (limit value: 0,05 ppm).

Storage: Store flat, supported and protected from direct contact with the ground. Keep in a well-ventilated place away from incompatible materials. Store in a cool dry place.



8. Exposure Controls / Personal Protection

Exposure guidelines: CJSC "Plywood plant 'Vlast Truda" meets the following exposure limits of wood dust: 15 mg/m3 (Total dust) and 5 mg/m3 (Respirable Fraction).

Engineering control: Due to the explosive potential of dust when suspended in air, precautions should be taken when sanding wood or wood products to prevent sparks or other ignition sources in ventilation equipment. Local exhaust ventilation is recommended when sanding this product. General dilution ventilation is recommended in processing and storage areas. Use wet methods, if appropriate, to reduce generation of dust.

Personal protective equipment:

Eye/face protection: Safety glass or goggles are recommended when using this product.

Skin protection: Impervious protective clothing and gloves recommended to prevent drying or irritation of skin.

Respiratory protection: A dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional.

9. Physical & Chemical Properties

Color: Various
Form: Solid wood
Odor: Resinous wood
PH: Not applicable

Freezing point: Not applicable Boiling point: Not applicable Flash point: Not applicable Flammability: Combustible

Flammability limits in air, upper, % by volume: Not available

Flammability limits in air, lower, % by volume: 40 g/m3 for wood dust

Vapor pressure: Not applicable Vapor density: Not applicable Specific gravity: Variable Solubility (water): Insoluble

Auto-ignition temperature: 399.2-500 F (204.4-260 C) for wood

Bulk density: Not applicable



10. Chemical Stability & Reactivity Information

Chemical stability: stable at normal conditions

Conditions to avoid: Contact with incompatible materials. High temperatures. Heat, flames and sparks. Dust may form explosive mixture in air.

Conditions of reactivity: None known

Incompatible materials: Strong acids, alkalis, oxidizing agents and drying oils.

Hazardous decomposition products: Thermal decomposition may emit irritating fumes or gases of carbon monoxide, carbon dioxide, aldehydes or organic acids.

Possibility of hazardous reactions: Will not occur

11. Toxicological Information

Toxicological information: No toxicological data available for this product. Toxicological information for components of this product is listed below.

Formaldehyde: Exposure to formaldehyde may cause temporary irritation to the nose and throat and may lead to respiratory disorders. In general, irritation will not be reported until concentrations reach 0.5 - 1.0 ppm.

Wood dust: Dryness, irritation may be caused by wood dust. Coughing or sinusitis. IARC and NTP classify wood dust as a carcinogen. This classification is based on the increased occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to hypopharynx, lung, lymphatic hematopoietic systems, stomach, colon or rectum with exposure to wood dust.

Sensitization: Not applicable for hardwoods.

Carcinogenicity:

WOOD/WOOD DUST (CAS Not Assigned)
IRAC – Group1 (Carcinogenic to humans)
NTP (National Toxicology Program) – Report on Carcinogens – known human carcinogens
U.S. – OSHA – Hazard Communication Carcigones
Present

Mutagenicity: Not available

Reproductive effects: Not available *Teratogenicity*: Not available

Synergistic materials: Not applicable

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12. Ecological Information

Ecotoxicity: Not available

Environmental effects: Not available

13. Disposal Considerations

Disposal instructions: Dispose of material according to Local, State, Federal and Provincial Environmental Regulations.

14. Transport Information

This product is not regulated as a hazardous material.

15. Regulatory information

National Regulations

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories: Immediate hazard – Yes

Delayed hazard – Yes Fire hazard – Yes Pressure hazard – No Reactivity hazard – No

Section 302 extremely hazardous substance: No

Section 311 hazardous chemical: Yes Section 313 hazardous chemical: No

US Federal regulations: Wood and wood products are considered manufactured articles and are exempt under OSHA's Hazard Communication Standard 29 CFR 1910.1200. Wood product, generated from sawing, sanding or machining wood and wood products, is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

WHMIS status: Exempt

Canadian regulations: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

16. Other Information

SANDING WOOD PRODUCTS CAN PRODUCE WOOD DUST, WHICH CAN CAUSE A FLAMMABLE OR EXPLOSIVE HAZARD.

WOOD DUST MAY CAUSE LUNG, UPPER RESPIRATORY TRACT, EYE OR SKIN IRRITATION.



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Precautions:

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Avoid dust contact with ignition source. Avoid frequent or prolonged inhalation of wood dust. Protect eyes from flying particles. Avoid dust contact with skin and wash exposed areas.

First aid:

If inhaled, remove to fresh air. In case of contact, flush eyes and skin with water. If irritation persists, call a physician.

Handling and storage:

Avoid frequent and prolonged inhalation of wood dust. Protect eyes from flying particles. Avoid contact with skin and wash exposed areas thoroughly. Change protective clothing and gloves when signs of contamination appear.

Wood products are combustible and, therefore, should not be subjected to temperatures exceeding the autoignition temperature. Wet down wood dust generated by sanding to reduce the likelihood of ignition or dispersion of dust into the air.

For any additional information, please, do not hesitate to contact <u>CJSC "Plywood plant 'Vlast Truda"</u>.