

MATERIAL SAFETY DATA SHEET FOR A HAZARDOUS MIXTURE
[Drawn up in accordance with Commission Regulation 1907/2006/EC (REACH) and 830/2015]

UNIEPAL DREW SPECIAL FR
COLORLESS SOLVENT-BASED FIRE-RESISTANT WOOD VARNISH

Written on: 08.10.2010
UPDATED ON: 01.06.2015

Edition: 4

SECTION 1: Identification of the substance/mixture and of the company/undertaking:

1.1. Product identifier:

Trade name: **UNIEPAL DREW SPECIAL FR**

- colorless solvent-based fire-resistant wood varnish

Substances which affected this classification: - hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics, hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

1.2. Relevant identified uses of the substance or mixture and uses advised against:

Identified use: UNIEPAL DREW SPECIAL FR is used to create a fire-resistant and decorative finishing coat on construction elements made of wood and wood derivatives: plywood, chipboard, OSBs used in residential and public interiors and ob building exteriors.

Use advised against: None determined

1.3. Details of the supplier of the safety data sheet:

Przedsiębiorstwo Produkcyjno-Handlowe "ADW" Sp. z o.o.

43-175 Wiry, ul. Zbożowa 2

Tel. 32 / 218 71 85 Fax : 32 323 00 85

Website: www.adw.com.pl

E-mail address: adw@adw.com.pl

1.4. Emergency telephone number:

Occupational Medicine Institute in Lodz: 042 657 99 00; 042 631 47 25

SECTION 2: Identification of hazards:

2.1 Classification of the substance or mixture

Flam.Liq.3: H226, Asp.Tox.1: H304, STOT SE3: H336

Flammable liquid and vapors. May have lethal effect when swallowed or inhaled.

May cause drowsiness or headache.

2.2. Labeling elements:

Hazard pictograms and warning label



GHS hazard statements

H226 Flammable liquid and vapors. H304 May have lethal effect when swallowed or inhaled.

H336 May cause drowsiness or headache.

Precautionary statements

P102 Keep out of the reach of children. P210 Keep away from heat, hot surfaces, sparks, open

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flames and other ignition sources. No smoking. P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting. P312 Call a POISON CENTER or a doctor if you feel unwell.

Additional marking

EUH066 Repeated exposure may cause skin dryness or cracking.

2.3 Other hazards

No information available on whether the mixture fulfills the PBT or vPvB criteria according to annex XIII of REACH. Adequate tests have not been carried out.

Directive 2004/42/EC - VOC: VOC limit as per Directive 2004/42/EC for this product (cat A/d):
in paint and varnish 400 g/l (2007)
The product contains maximum 400 g/l VOC

SECTION 3: Composition / information on ingredients:

3.1. Substances:

Not applicable

3.2. Mixtures:

Composition: a mixture of alkyd resin in a solvent and auxiliary solutions

CAS: - EINECS: -919-857-5/ Index number: - Proper registration number: 01-2119463258-33-XXXX	<u>Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics</u> Flam.Liq.3: H226, Asp.Tox.1: H304, STOT SE3: H336, EUH066	<32%
CAS: - EINECS: - Index number: - Proper registration number: 01- 2119471843-32-XXXX	Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics Flam.Liq.3: H226, Asp.Tox.1: H304, STOT SE3: H336, EUH066, Aquatic Chronic 3 H412,EUH066	<10%

SECTION 4: First aid measures:

4.1 Description of first aid measures:

long-term inhalation:

- take the injured out of the exposure site, administer oxygen / perform CPR with obstructed breathing, keep at rest, protect against heat loss, call a physician.

skin contact:

- remove contaminated clothing, thoroughly wash with soap and a large amount of water. Seek medical assistance if irritation persists. DO NOT USE solvents or thinners.

eye contact:

- wash abundantly with water with the eyelids open, consult a physician

ingestion:

- when swallowed, do not induce vomiting, rinse your mouth with water, keep at rest, immediately call a medical assistance

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burns:

- if the contaminated clothing catches on fire, wash abundantly with water. Remove loose clothing. Do not tear off any clothing that stuck to one's skin. Seek medical assistance.

4.2. Most important symptoms and effects, both acute and delayed:

No data available

4.3 Indication of any immediate medical attention and special treatment required for the injured:

No data available

SECTION 5: Firefighting measures:

5.1 Extinguishing media:

Suitable extinguishing media: Sprinkling with water, alcohol-resistant foam, powder or carbon dioxide. Clean tanks and their environments by sprinkling with water.

Suitable extinguishing media: full water jet.

5.2. Special hazards arising from the substance or mixture:

Since the product contains organic, flammable ingredients, black, thick smoke containing hazardous combustion products can be formed during fire (see point 10). Exposure to decomposition products may be dangerous to health. Cool closed tanks exposed to fire by sprinkling them with water. Do not allow fire extinguishing water to penetrate the water distribution or sewage system.

5.3 Advice for firefighters:

In the event of fire, wear suitable respiratory apparatus.

SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Ventilate area. See safety measures in pt. 7 and 8. Use respiratory protective devices. Do not let vapors accumulate in amounts which could form explosive concentrations. Vapors can accumulate in depressions. Remove ignition sources.

6.2 Environmental precautions:

Avoid soil and water contamination, do not discharge to sewage. In the event of releasing large product amounts or contaminating the environment, notify suitable authorities and chemical rescue service.

6.3 Methods and materials for containment and cleaning up:

Clean using detergents. Avoid solvents. Collect the spillage using non-flammable absorbent (earth, sand, diatomaceous earth, vermiculite) and place in a disposal tank as per local/domestic regulations (see pt. 13).

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6.4 References to other sections:

None

SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

Do not exceed the maximum permissible exposure limits in the workplace (see pt. 8). Use in rooms equipped with suitable exhaust ventilation only. Avoid skin, eye and clothing contamination. Smoking, eating and drinking should be banned in the place of use. Avoid inhaling vapor or mist. Personal protective equipment - see pt. 8.

Guidelines for fire safety and anti-explosive protection:

Prevent the concentration of flammable and/or explosive vapors in air in the workplace beyond permissible values. When transferring the product from one container to another, use earth connection and conductive materials. Do not use sparking devices. All personnel should have anti-static footwear, and the floor should be made of conductive materials. Keep away from heat, sparks and open flames. Take measures to eliminate static electricity (which can be the source of ignition of organic vapors). The product should only be used in rooms where sources of open flames and other sources of ignition were removed. Do not smoke. Storing contaminated rags and old paint residue, particularly in filters, can be the source of spontaneous ignition. Materials contaminated with the product, such as cleaning rags, paper towels and protective clothing can spontaneously ignite several hours later. To avoid a fire, all contaminated materials should be kept in sealed, metal containers or stacked in single layers outside the rooms, left there to dry, or placed in metal containers sprinkled with water. When disposed of in a landfill, contaminated materials should be washed with warm water with soap. At the end of each work day, contaminated materials should be removed from the workplace and stored outside. Keeping the workplace clean, having waste collected regularly and performing regular filter maintenance will reduce the risk of spontaneous ignition and other fire threats.

7.2 Conditions for safe storage, including any incompatibilities:

Storage:

Requirements for storage rooms and vessels:

Observe the recommendations on the label. Keep out of unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage/product release. Store at 5- 30°C in a dry, well-ventilated room, away from sources of heat, ignition and direct sunlight. Solvent vapors are heavier than air and can accumulate right above the floor. Fumes can mix with air to form an explosive mixture. Electrical installations / devices must comply with technical safety standards. 16 Keep away from sources of ignition - no smoking. Do not freeze. Store according to effective domestic laws.

Guidelines on joint storage:

Keep away from oxidants, strong acids and alkali materials.

7.3 Specific end use(s):

None

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SECTION 8: Exposure controls/personal protection:

8.1. Control parameters:

Specification	EL	STEL	MAC	ACBM
Polycyclic-aromatic hydrocarbons (PAH) - as the sum of concentration products and carcinogenicity coefficients 9 carcinogenic PAHs [-]*	0.02 mg/m ³	—	—	—

* PAHs are the ingredients of hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

Legal basis: Journal of Laws of 2104, item 817.

Recommended monitoring procedures

Use the procedures for monitoring concentrations of hazardous materials in the air and procedures for the control of air cleanliness in the working environment - where available and reasonable - in accordance with relevant Polish or European standards taking into account the conditions at the site of exposure and the appropriate measurement methods adapted to the working conditions. The type, nature, and frequency of measurements and tests shall comply with the requirements contained in Ordinance of the Minister of Health of 2 February 2011 Journal of Laws No. 33, item 166).

DNEL value

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics (CE 927-241-2)

employee, long-term exposure through the skin, systemic effect	300 mg/kg/day
employee, long-term exposure through inhalation, systemic effect	1500 mg/m ³
consumer, long-term exposure through ingestion, systemic effect	300 mg/kg/day
consumer, long-term exposure through the skin, systemic effect	300 mg/kg/day
consumer, long-term exposure through inhalation, systemic effect	900 mg/m ³

8.2 Exposure control:

Personal protection:

- respiratory protection: regardless of whether spraying is performed in painting booths, it is not possible to fully control the contents of solids and solvent vapors in air. In these cases, operators should wear respirators fed with clean air throughout the painting process, until the concentration of solvent vapors falls below the permissible limit.

- eye protection: protective glasses - use when splashing is possible.

- hand protection: with long-term or repeated contact, use gloves protecting against chemical hazards. Protective cream can help protect exposed skin. However, it should not be used after exposure. Wash your skin after each contact with the product.

Use chemical-resistant protective gloves as per EN 374.

Recommended gloves: Nitrile.

Minimum resistance time: 480 min.

The recommended gloves are selected based on the dominant solvent used in the product.

When long-term or repeated exposure is expected, gloves with protection class 6 (resistance time of 480 min. and more according to EN 374) are recommended. When short-term exposure is expected, gloves with protection class 2 (resistance time of 30 min. and more according to EN 374) are

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recommended).

NOTICE: the choice of suitable gloves for individual applications and time of use in the workplace should be made in consideration of all important factors, such as: other chemical substances which can be used, technical requirements (protection against cuts/piercing, ergonomics, thermal protection), potential body reaction to the glove material, as well as the instructions/specifications provided by the glove manufacturer.

- skin and body protection: protective clothes

SECTION 9: Physical and chemical properties:

9.1. Information on basic physical and chemical properties:

- | | |
|---|--|
| a) Appearance: | transparent, viscous liquid |
| b) Odor: | characteristic |
| c) odor threshold: | no data available |
| d) pH: | no data available |
| e) melting/solidification point: | Approx. 0°C |
| f) initial boiling point and boiling range: | 130 – 170 (solvent) |
| g) flash point: | >23°C |
| h) evaporation rate: | No data available |
| i) flammability: | No data available |
| j) upper/lower explosive limit: | 0,6 – 7 % vol. (for the solvent) |
| k) vapor pressure: | No data available |
| l) vapor density: | No data available |
| m) relative density (at 20°C): | 1.01 g/cm ³ |
| n) solubility: | in water: insoluble
in other solvents: xylene, white spirit |
| o) partition coefficient: n-octanol/water: | no data available |
| p) autoignition temperature: | above 200°C |
| q) decomposition temperature: | no data available |
| r) viscosity (25°C): | no data available |
| s) explosive properties: | no data available |
| t) oxidizing properties: | no data available |

9.2. Other Information;

None

SECTION 10: Stability and reactivity:

10.1. Reactivity:

No data available

10.2. Chemical stability

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Stable in correct storage conditions.

10.3. Possibility of hazardous reactions:

No data available

10.4. Conditions to avoid:

High temperatures, open flames, other sources of ignition

10.5. Incompatible materials:

None

10.6. Hazardous decomposition products:

Gases containing carbon oxides and nitrogen oxides, among others, can be produced during fire.

SECTION 11: Toxicological information:

11.1 Information on toxicological effects:

Toxicity of components:

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics [CE 927-241-2]

Acute toxicity LD₅₀ (oral, rat) > 5000 mg/kg

Acute toxicity LD₅₀ (skin, rabbit) > 5000 mg/kg

Acute toxicity LC₅₀ (inhalation) > 4951 mg/l/4h

Toxicity of the mixture

Acute toxicity

Based on available data, the classification criteria are not met.

Caustic/irritating effect on the skin

Based on available data, the classification criteria are not met.

Serious damage to eyes/irritating effect on the eyes

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Mutagenic effect to reproductive cells

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Toxicity for reproduction

Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity (STOT) – repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

May have lethal effect when swallowed or inhaled.

SECTION 12: Ecological information:

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12.1. Toxicity

Toxicity of components:

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Acute toxicity to fish LL₅₀ 10-30 mg/l/96h/Oncorhynchus mykiss

Acute toxicity to crustacean EL₅₀ 22-26 mg/l/48h/Daphnia magna

Acute toxicity to algae EL₅₀ subcapitata > 1000 mg/l/Pseudokirchneriella

Toxicity to algae NOERL < 1 mg/l/Pseudokirchneriella subcapitata

Toxicity of the mixture

The product is not classified as posing a hazard for the environment.

12.2 Persistence and degradability

Data for the components

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

Biodegradation in 89% within 28 days

Data for the mixture

No data available for the mixture

12.3. Bioaccumulative potential

No data available for the mixture

12.4 Mobility in soil.

The product is insoluble in water and is therefore not mobile in soil. The mobility of individual ingredients depends on their hydrophilic and hydrophobic properties and abiotic and biotic conditions in soil, including its structure, climatic conditions, season of the year and organisms inhabiting the soil.

12.5. Results of PBT and vPvB assessment

Not determined.

12.6 Other adverse effects.

The product is not classified as posing a hazard for the ozone layer. Consider other adverse effects for the environment, posed by individual ingredients of the mixture (e.g. capacity to disturb the hormone balance, impact on global warming).

SECTION 13: Waste disposal considerations:

Do not dispose of this product as unsorted municipal waste.

Destroy through incineration in dedicated devices complying with waste disposal regulations.

Waste code: 08 01 11* - waste paint and varnish containing organic solvents or other dangerous substances

Take empty packaging to a suitable landfill or dispose of it according to local regulations.

SECTION 14: Transport information:

shipping name: UNIEPAL DREW - colorless solvent-based fire-resistant wood varnish

14.1 UN number: 1263

14.2. 14.2 UN proper shipping name: Paint

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14.3. 14.3 Transport hazard class(es): 3

14.4. Packaging group: III

14.5. Environmental hazards: hazard identification number: 30
warning label: no. 3

14.6. 14.6 Special precautions for the user:

None

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

None

The product has a classification assessment concerning the transport of hazardous goods. Based on regulation no. 3.3.3.1.5. (ADR agreement), a product packed in vessels up to 450 l is not regulated by ADR (homogeneous non-poisoning and non-caustic solutions and mixtures with a flash point of at least 23°C (viscous materials, such as paint and varnish, with the exception of materials containing more than 20% of nitrocellulose, packed in vessels of up to 450 l).

SECTION 15: Regulatory information:

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

Act of 25 May 2011 on chemical substances and their mixtures (Journal of Laws No. 63, item 322, as amended).

Regulation of the Minister of Labor and Social Policy of 6 June 2014 on the maximum permissible concentration and intensity of harmful agents in the workplace (Journal of Laws No 2014, item 817).

The Waste Act of 14 December 2012. (Journal of Laws of 2103, item 21).

Act of 27 May 2001 on packaging and packaging waste (Journal of Laws 2103, item 888).

Ordinance of the Minister of the Environment of 9 September 2014 on the waste catalog (Journal of Laws of 2014, item 1923).

Ordinance of the Minister of the Economy of 21 December 2005 on the basic requirements for personal protective equipment (Journal of Laws, No. 259, item 2173).

Ordinance of the Minister of Health of 2 February 2011 on tests and measurements of factors detrimental to health in the work environment (Journal of Laws, No. 33, item 166).

European ADR agreement concerning the international road transport of hazardous goods.

Regulation (EC) **1907/2006/WE** of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC with further amendments.

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 with amendments.

Commission Regulation (EU) **830/2015** of 28 May 2015 amending Regulation (EC) No 1907/2006 of

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the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Directive **2008/98/EC** of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

European Parliament and Council Directive **94/62/EC** of 20 December 1994 on packaging and packaging waste.

15.2. Chemical safety assessment:

No data available

SECTION 16: Other Information:

Full text of GHS hazard statements from section 3 of this MSDS

H226 Flammable liquid and vapors.

H304 May have lethal effect when swallowed or inhaled.

H336 May cause drowsiness or headache.

H412 Harmful to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

Explanation of abbreviations and acronyms

Aquatic Chronic 3 Harmful to aquatic life with long lasting effects cat. 3

Asp. Tox. 1 Aspiration hazard cat. 1

Flam. Liq. 3 Flammable liquid substance, cat. 3

STOT SE 3 Specific target organ toxicity – single exposure, cat. 3

Threshold Limit Value (TLV)

Short-term exposure limit (STEL)

Excursion Limit

Admissible concentration in biological material (ACBM)

PBT Persistent, Bioaccumulative, Toxic

vPvB very Persistent, very Bioaccumulative.

Training

Before starting any works involving the product, the user should familiarize OHS principles for handling chemicals, and should particularly complete a suitable occupational training.

Additional information

The classification was made on the basis of the physical and chemical properties of the mixture and the contents of hazardous ingredients, applying the calculation method specified in regulation no. 1272/2008/EC (CLP).

Updated on:

01.06.2015