BioProGreen

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EACCE export approval number:6410 **Patent Number** :64095319

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Safety data
TEREBENTHINE OIL

I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/BUSINESS

- **Product identification** : 100% pure, natural and integral essential oil:
- **Trade name** Turpentine essential oil
- **Use** : industrial, reserved for professional use:
- **Company identification** BioProGreen
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  E-mail:contact@bioprogreen.com
- **In case of emergency, call the anti-poison and pharmacovigilance center: 0801000180**

Product information :

- **Product Name**:Turpentine essential oil
- **Botanical name**:Pinus Pinaster
- **Method of obtaining**:from the resin of certain types of pine

II. IDENTIFICATION OF RISKS

Classification of the substance or mixture:

→ **Classification according to Regulation (EC) No. 1272/2008 [CLP]:**

- Aspiration hazard, category 1 ---------- --------H304
- Dangerous for the aquatic environment – acute danger, category 1 ----------H400
- Dangerous for the aquatic environment – chronic hazard, category 2 ------ H411

Label elements:

→ **Labeling according to Regulation (EC) No. 1272/2008 [CLP]:**

Hazard pictograms (CLP):

GHS08 GHS09

Signal word (CLP): Hazard

Hazard statements (CLP):

H304 - May be fatal if swallowed and enters airways H400 - Very toxic to aquatic organisms

H411 – Toxic to aquatic organisms, causes long-term adverse effects

Precautionary statements (CLP):

P273 – Avoid release to the environment.

P301+P310 - IF SWALLOWED: Call a POISON CENTER or doctor immediately.

P331 - DO NOT induce vomiting.

P501 - Dispose of contents/container in containers/containers provided for this purpose according to current regulations.

Other dangers:

- **Flammability:**Turpentine oil is highly flammable and can cause fires or explosions in the presence of heat sources, open flames or sparks.

- **Risk for the health :**Inhalation of turpentine oil vapors may cause irritation of the respiratory tract and lungs. Prolonged skin contact may cause skin irritation, and eye contact may cause eye irritation.

- **Toxicity:**Accidental ingestion of turpentine oil can be toxic, causing serious symptoms such as abdominal pain, nausea, vomiting, and respiratory problems.

III. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance:

- **Name**:turpentine essential oil
- **LOT N°**:34923
- **EC number**:232-350-7
- **CAS No.**:8006-64-2

IV. FIRST AID

Description of first aid:

- If the exposed person is unconscious, never give anything by mouth.

- **First aid if you feel unwell:**consult a doctor as soon as possible. If you can, show them the product label to provide additional information.
- **First aid for inhalation**:move the exposed person to a well-ventilated area and let them breathe fresh air. If she has trouble breathing, seek medical attention immediately.
- If turpentine oil comes into contact with skin, immediately remove contaminated clothing and wash affected skin with plenty of soap and water.
  If skin irritation persists, consult a doctor.
- In case of contact with eyes, rinse them with plenty of water for at least 15 minutes while holding the eyelids apart. Remove contact lenses if the person wears them and they can be easily removed. Consult a doctor if eye irritation persists.
- If accidentally swallowed, immediately rinse mouth with water and DO NOT MAKE the exposed person vomit. Consult a doctor or poison control center immediately for further advice.

Main symptoms and effects, both acute and delayed:

- **Skin irritation :**Prolonged or repeated contact with skin may cause skin irritation, manifested by redness, itching or burning sensations.

- **Eye irritation**:Contact with eyes may cause eye irritation, characterized by redness, pain, itching and burning sensation.

- **Respiratory tract irritation:**Inhalation of turpentine oil vapors may cause irritation of the respiratory tract, manifested by coughing, tightness in the chest, difficulty breathing and possibly headaches and dizziness.

- **Allergic reactions:**Some people may develop allergic reactions to turpentine oil, manifesting as rash, itching, redness, or swelling.

Indication of any immediate medical attention and special treatment needed :

- No additional information available.

V. FIRE-FIGHTING MEASURES

Extinguishing means:

- **Suitable extinguishing media**:Foam, Dry powder, Carbon dioxide, Water spray, Sand.
- **Unsuitable extinguishing agents**:Do not use a strong stream of water.

Special hazards arising from the substance or mixture :

- No additional information available.

Advice for firefighters:

- **Firefighting instructions**:Cool exposed containers by spraying or misting water. Use caution when fighting any chemical fire. Prevent firefighting wastewater from contaminating the environment.

- **Protection in case of fire**:Do not enter fire area without protective equipment, including respiratory protection.

VI. MEASURES TO BE TAKEN IN CASE OF ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

- **For non-rescuers:**

Emergency procedures : Remove unnecessary personnel.

- **For first responders:**

Protective equipment : Provide adequate protection for cleaning crews. :
Emergency procedures Ventilate the area.

Methods and materials for containment and cleaning up:

Confinement :

- Use absorbent materials such as diatomaceous earth, sand, or commercial absorbents specific for chemicals.
- In the event of a spill, quickly mark off the affected area with absorbent barriers or socks to prevent dispersion of the liquid.

Cleaning :

- After containing the turpentine oil, collect the liquid and absorbent materials using chemical-resistant scoops and place them in waterproof containers.

- Clean the affected surface with suitable detergents, followed by rinsing with clean water. Make sure the cleaning area is well ventilated.
- Dispose of waste in accordance with local regulations regarding hazardous waste disposal.

Safety Precautions:

- Always wear appropriate personal protective equipment, such as chemical-resistant gloves, safety glasses, and a respirator if necessary.

- Make sure cleaning is done in a well-ventilated area to avoid inhalation of vapors.

VII. HANDLING AND STORAGE

Precautions for safe handling:

Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, and before leaving work. Ensure good ventilation of the work area to avoid the formation of vapors. No open flames. NO SMOKING. Take precautionary measures against electrostatic discharge. Do not use spark-producing tools. Avoid breathing dust/fumes/vapours/aerosols.

Conditions for safe storage, including any incompatibilities:

- **Storage temperature:**5 - 25°C
- **Storage area :**Store in a cool, well-ventilated place. Store away from light. Protect from heat.
- **Storage conditions :**Store only in the original container in a cool, well-ventilated place away from heat sources, direct sunlight. Keep containers closed when not in use.
- **Incompatible products**:strong foundations. Strong acids
- **Incompatible materials:**sources of ignition. Direct rays of the sun.
- **Technical measures:**follow proper grounding procedures to avoid static electricity. Earthing/equipotential bonding of the container and receiving equipment. Use explosion-proof ventilation equipment.
- Store in a cool, ventilated area (adequate ventilation). Avoid humid atmospheres, heat and exposure to direct sunlight. Store the product in its original packaging, tightly closed and preferably full.

Specific end use(s):

- No additional information available.

VIII. EXPOSURE CONTROL / PERSONAL PROTECTION

Personal protective equipment (PPE):

- Wear chemical solvent resistant gloves to protect hands.
- Use protective glasses to avoid splashes in the eyes.
- In cases where ventilation is insufficient to control exposure, a respirator with appropriate cartridges for organic vapors may be necessary.

IX. PHYSICAL AND CHEMICAL PROPERTIES

Information on essential physical and chemical properties:

- **Physical state** : Fluid
- **Appearance** : Clear, slightly viscous mobile liquid:
- **Color** colorless to slightly yellow
- **Smell** : smell of pine
- **Olfactory threshold** : No data available: No
- **PH** data available: No data
- **Relative evaporation rate** available

- (Butyl acetate=1)
- **Fusion point** : No data available: No
- **Freezing point** data available: No data
- **Boiling point** available: 93°C
- **Flash point**
- **Auto-ignition temperature:**No data available
- **Decomposition temperature** : No data available: non-
- **Flammability (solid, gas)** flammable
- **Vapor pressure** : No data available: No
- **Relative vapor density at 20°C** data available: Poorly
- **Solubility** soluble in water: No data
- **Vapor pressure** available: 0.864
- **Relative density at 20°C**
- **Refractive index** : 1,470
- **Log Pow** **:**No data available: No
- **Kinematic viscosity** data available: No data
- **Viscosity, dynamic** available: No data
- **Explosive properties** available: No data
- **Oxidizing properties** available: No data
- **Explosive limits** available

X. STABILITY AND REACTIVITY

- **Reactivity**:Turpentine oil can react with certain chemicals, so it is important to take precautions when handling it.
- **Chemical stability**:It is generally stable, but can react with certain materials or under certain conditions.
- **Conditions to avoid**:Direct rays of the sun.Avoid extremely high or extremely low temperatures, as well as any source of ignition or heat.
- **Incompatible materials**:Strong acids. Strong foundations.
- **Hazardous decomposition products**:Smoke, Carbon monoxide, Carbon dioxide.

XI. TOXICOLOGICAL INFORMATION

- **Skin corrosion/irritation**:Unclassified

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

- **Serious eye damage/eye irritation**:Unclassified

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

- **Respiratory or skin sensitization:**Unclassified

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

- **Germ cell mutagenicity**:Unclassified

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

- **Carcinogenicity**:Unclassified

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

- **Reproductive toxicity**:Unclassified

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

- **Specific target organ toxicity (single exposure)**:Unclassified Based on available data, the classification criteria are not met.
- **Specific target organ toxicity (repeated exposure)**:Unclassified Based on available data, the classification criteria are not met.
- **Aspiration hazard**:May be fatal if swallowed and enters airways.

Given the available data, the classification criteria are not met

XII. ECOLOGICAL INFORMATION

- **Toxicity:**Turpentine oil may be toxic to living organisms with prolonged exposure or at high concentrations.
- **Ecology-Water:**may have adverse effects on aquatic ecosystems if spilled into water.
- **CE50 Daphine:**The EC50 index for daphnia, which measures the concentration at which 50% of organisms are affected, depends on the specific conditions of exposure and can vary.

- **Persistence and degradability:**Turpentine oil can be persistent in water, meaning it can remain present for a period of time before degrading.

- **Bioaccumulation potential:**Some compounds in turpentine oil may have bioaccumulation potential, that is, they can accumulate in the tissues of living organisms.

- **Mobility in the ground:**Turpentine oil can be mobile in soil, meaning it can move through the environment and contaminate groundwater.
- **Results of PBT and VPVB assessments**:Evaluations of persistence, bioaccumulation and toxicity (PBT) as well as very persistent and very bioaccumulative (VPVB) depend on chemical specifications and local regulations.

- **Other adverse effects:**Turpentine oil can have adverse effects on aquatic ecosystems, such as disrupting food chains and reducing biodiversity.

XIII. DISPOSAL CONSIDERATIONS

Waste treatment methods

- **Recycling :**Turpentine oil can be recovered from waste through distillation or extraction processes. This method allows turpentine oil to be reused in various applications, reducing waste.
- **Biological treatment**:Turpentine oil waste can be treated using specific microorganisms that can break down harmful compounds. Bacteria and fungi can be used in bioreactors to degrade organic contaminants present in oil.

- **Chemical treatment:**Chemical reactions can be used to transform the harmful components of turpentine oil into less dangerous substances. For example, chemical oxidation can be used to degrade hydrocarbons present in waste.

- **Secure storage:**If none of the treatment methods are viable, turpentine oil waste can be stored safely in appropriate facilities, such as landfills specifically designed for hazardous waste.

XIV. TRANSPORT INFORMATION

Special precautions to be taken by the user:

Transportation by land:

- Classification code (ADR): 3 (flammable liquids)
- Special provisions (ADR): SP130 (flammable liquids)

- Limited quantities (ADR): 30 liters per outer packaging
- Excepted quantities (ADR): 1 liter for small containers for domestic use
- Vehicle for tank transport:The vehicle must be designed for the transport of flammable liquids and equipped with appropriate safety devices.
- Transport category (ADR):Class 3 - Flammable liquids
- Hazard No. (Kemler code):30 (for flammable liquids)

Orange panels:

- Tunnel Restriction Code (ADR):E (tunnel prohibited)

Transport in bulk in accordance with Annex II of MARPOL 73/78 and the IBC Code:

- **Annex II of the MARPOL 73/78 convention:**This annex regulates the transport of noxious and polluting liquid substances in bulk by sea. Turpentine oil is classified as a dangerous substance and must be transported in accordance with the provisions of this annex to avoid marine pollution.
- **IBC Compendium (International Bulk Chemical Code):**This compendium provides detailed guidelines for bulk transportation of hazardous chemicals, including turpentine oil. It specifies requirements for packaging, loading and unloading systems, as well as safety measures to be taken during transport.

XV. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific to the substance or mixture:

- **REACH Regulation:**It may impose restrictions on the production, use and transportation of turpentine oil based on its chemical properties and potential hazards to human health and the environment.

- **SEVESEO III Directive:**It imposes risk prevention and control measures in the industrial installations concerned and may also have implications for the transport of these substances.
- **CLP Regulation:**It may require specific classification for turpentine oil based on its physical and chemical properties, which could influence transportation requirements.
- **Regulations on the transport of dangerous goods by road (ADR):**The ADR regulations regarding labeling, packaging, documentation and safety requirements therefore also apply.

XVI. VARIOUS INFORMATION

Here is some miscellaneous information about turpentine oil:

- Turpentine oil is a colorless to pale yellow liquid extracted from the resin of pine trees.
- It is widely used as a solvent in oil paints, varnishes and cleaning products.

- In addition to its use as a solvent, turpentine oil is also used in the manufacture of pharmaceuticals and perfumes.
- It is known for its softening and cleaning properties, making it a common ingredient in many household and cosmetic products.
- Turpentine oil can also be used as a diluent for essential oils and as an ingredient in some natural remedy recipes.
- It has a distinctive scent and is flammable, so it should be handled with care.

This information is based on our current knowledge and describes the product for health, safety and environmental purposes only. They should therefore not be interpreted as guaranteeing any specific property of the product.