



Plant's Power Inc
3-2700 St.Clair Ave west
Toronto, Ontario, M6N 1M2
Contact: 1-416-766-1254

Material Safety Data Sheet Black Spruce

Section 1: Product and Company Identification

Product Name: Black Spruce, Organic

Botanical Name: *Picea mariana*

CAS No.: 91722-19-9

Contact information:

Plant's Power Inc 3-2700 St.Clair Ave west Toronto, Ontario M6N 1M2 Contact: 1-416-766-1254 http://www.PlantPower.ca contactus@plantpower.ca	24 HOUR EMERGENCY TELEPHONE NUMBER: (647)-427-4480
--	---

Section 2: Composition and Information on Ingredients

Composition:

Black Spruce, Organic

CAS No.: 91722-19-9

Dangerous ingredients

Classification according to Regulation (EC)

n° 1272/2008 ≤ 22.00 %

N° CAS : 79-92-5

Camphene

N° EINECS : 201-234-8

Flam. Sol. 2, H228; Eye Irrit. 2, H319; Aquatic Acute 1, Aquatic Chronic 1, H410 ≤ 18.00%

N° CAS : 80-56-8

Alpha pinene

N° EINECS : 201-291-9

Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Sens. 1, H317; Aquatic Acute 1,
Aquatic Chronic 1, H410 ≤ 11.00 %

N° CAS : 13466-78-9

Delta 3 carene

N° EINECS : 236-719-3

Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Sens. 1, H317; Aquatic Chronic 2,
H411 ≤ 7.00%

N° CAS : 127-91-3

Beta pinene

N° EINECS : 204-872-5

Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Sens. 1, H317; Aquatic Acute 1,
Aquatic

Chronic 1, H410 ≤ 6.00%

N° CAS : 123-35-3

Myrcene

N° EINECS : 204-622-5

Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 3, H412 ≤ 5.00 %

N° CAS : 5989-27-5

D-Limonene

N° EINECS : 227-813-5

Flam. Liq. 3, H226; Asp. Tox. 1, H304; Skin Irrit. 2, H315; Skin Sens. 1, H317;
Aquatic

Acute 1, Aquatic Chronic 1, H410 ≤ 3.00 %

N° CAS : 555-10-2

Beta phellandrene

N° EINECS : 209-081-9

Flam. Liq. 3, H226; Asp. Tox. 1, H304 ≤ 3,00 %

N° CAS : 507-70-0

Borneol

N° EINECS : 208-080-0

Flam. Sol. 2, H228 ≤ 3,00 %

N° CAS : 586-62-9

Terpinolene

N° EINECS : 209-578-0

Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411 ≤ 2,00 %

N° CAS : 562-74-3

4-TerpinenoN°

EINECS : 209-235-5

Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Irrit. 2, H319 ≤ 2,00 %

N° CAS : 98-55-5

Alpha terpineol

N° EINECS : 202-680-6

Skin Irrit. 2, H315; Eye Irrit. 2, H319 ≤ 2,00 %

N° CAS : 470-82-6

Cineol 1,8 (Eucalyptol)

N° EINECS : 207-431-5

Flam. Liq. 3, H226

Section 3: Hazards Identification

Classification according to Regulation (EC) n° 1272/2008:

Xn: Harmful

Hazard class and Hazard category Hazard Statement

Flam. Liq. 3 (FL 3) H226 - Flammable liquid and vapour.

Asp. Tox. 1 (AH 1) H304 - May be fatal if swallowed and enters airways.

Eye Irrit. 2 (EDI 2) H319 - Cause serious eye irritation.

Skin Sens. 1 (SS 1) H317 - May cause an allergic skin reaction.

Aquatic Acute 1, Aquatic Chronic 1 (EH A1,C1) H410 - Very toxic to aquatic life with long lasting effects.

Other Hazard:

Allergens (according to Cosmetic Directive 2003/15/EC):

D-Limonene (<=5.0%)

Precautionary Statement(s)

Additional Hazard Information(s): Not regulated

CMR* substances not requiring classification: None

N Dangerous for environment

R10 Flammable

R36 Irritating to eyes

R43 May cause sensitisation by skin contact

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

R65 Harmful: may cause lung damage if swallowed

GHS02

GHS07

GHS08

GHS09

Danger

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H319 Cause serious eye irritation.

H410 Very toxic to aquatic life with long lasting effects.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor, physician.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P305 + P351 + P338

P501 Dispose of contents/the container in accordance with current legislation.

Section 4: First Aid Measures

Skin contact: Rinse with plenty of water and change clothing if necessary. If irritation persists or if skin lesions of any kind appear, seek medical advice.

Excessive inhalation: Remove victim to fresh air. Keep them warm and allow them to rest quietly. If harmful effects persist or worsen, call a doctor. If patient is unconscious, place them in the lateral recovery position and call a doctor immediately. Make sure the area is well ventilated.

Emergency Medical Care or Special Treatment

Eye contact: Rinse immediately with plenty of running water (minimum 2 litres), opening the eyes wide under the tap. If possible, lift the upper eyelid and rinse. If irritation persists or if skin lesions of any kind appear, consult an eye specialist, taking the product with you. If you wear contact lenses, rinse your eyes immediately. The lenses will probably fall out during rinsing. If not, remove them after rinsing. Do not put them back in. If you wear soft contact lenses, throw them away even if new. Hard contact lenses may be used again after proper cleaning by an eyecare professional. In all cases, do not wear contact lenses after the accident without the advice of an eye specialist.

Ingestion: Rinse the mouth out with water. Remove victim to fresh air. Keep them warm and allow them to rest quietly. Do not induce vomiting unless otherwise directed by a medical professional. If vomiting occurs spontaneously, keep head low down to prevent aspiration into the lungs. If harmful effects persist or worsen, call a doctor. If patient is unconscious, place them in the lateral recovery position and call a doctor immediately. Make sure the area is well ventilated.

In general, in case of doubt or if symptoms persist, ask for medical advice. Never give anything by ingestion to an unconscious person.

No special treatment necessary. Symptomatic treatment required. Contact a poison specialist immediately if large quantities have been ingested or inhaled.

Section 5: Fire and Explosion Data

Advice to Fire-fighters: Direct jet of water.
Carbon dioxide (CO₂) or powder fire extinguisher (ABC Classes), foam extinguisher.
Avoid breathing in vapour or smoke emitted. Use a mask if necessary.
Do not attempt to fight the fire with water, which tends to feed rather than smother the flames. Essential oils have the ability to float on water and this causes the fire to propagate more quickly. To put out an essential oil-based fire in its early stages, use a specific ABC dry powder fire extinguisher (or equivalent). Small fires can be smothered by covering with earth, sand or a blanket.
Possible production of toxic fumes under fire.

Section 6: Accidental Release Measures

Containment and cleaning methods and equipment:

Remove all possible ignition sources.

Ventilate the premises. Do not smoke.

Large spills must first be absorbed with inert material which must then be swept up and disposed of in accordance with the regulations in force.

Avoid contaminating the drainage system, surface water or ground water. Dispose of any contaminated cloths, sponges, etc. in accordance with the regulatory instructions in force.

Section 7: Handling and Storage

Precautions for safe handling

Recommendations:

Avoid contact, do not inhale hot vapour, do not ingest, work under an extraction hood or arm. Evacuate all unnecessary personnel not wearing protective clothing. Do not touch or step in the spilled product. Ensure adequate ventilation. If the ventilation system is inadequate, wear an appropriate respiratory protection device.

a) Personal precautions

Keep in original container or other approved container made from a compatible material and keep tightly closed when not in use. Do not reuse empty containers as they can hold product residues.

b) Incompatibilities

Avoid discharge into the environment. Work in containment area. Use an appropriate container to avoid contaminating the surrounding environment.

c) Environment

Reproduction prohibited by any means, except for the purpose of citation, with reference to the origin or when the use or the product marketing covered by this document and supplied by NHR Organic Oils S.A. - France, to the exclusion of all another origin.

Safe storage taking all incompatibilities into account

Hygiene measures: It is forbidden to eat, drink or smoke in areas where this product is handled, stored or used. Personnel are recommended to wash their hands after using the product and remove contaminated clothing and protective equipment before entering eating or rest areas or toilets.

a) How to avoid creating:

i) Explosive atmospheres: No risk at ambient temperature; observe ATEX* requirements.

ii) Corrosive conditions: Store in stainless steel or amber glass containers if possible

Specific end use(s): Comply with the regulations and product data sheet. No specific recommendations. Apply the above handling guidelines.

Fire hazard: Do not heat over a naked flame; do not expose the vapours to a naked flame or any other ignition source. Do not smoke while handling the product. During incorporation, the product must be kept at a relatively low temperature. If it is necessary to raise the temperature, this must be done with caution and for as short a time as possible.

iii) Evaporation conditions: Store in closed containers protected from heat and light. Opened containers must be carefully reclosed and kept upright to avoid leakage.

v) Storing with incompatible substances or mixtures : Label according to the regulations in force, refer to chemical incompatibility table (INRS* -Storage and transfer of hazardous chemicals).

iv) Potential ignition sources (including electrical equipment): Hot surfaces, naked flames, hot gases, mechanically produced sparks and ionizing radiation should be kept to a minimum or avoided completely. Have electrical equipment and wiring checked periodically by an approved electrician. Avoid static discharge by earthing your metal appliances. Protect electrical equipment from lightning by installing lightning arrester.

b) How to control the effects of:

i) Weather conditions: Do not store outside.

ii) Ambient pressure: No known hazard.

temperature : Store in a temperate area; to avoid drastic differences in temperature, insulate the facility as much as possible or store in a cold room.

iii)

v) Humidity : Store in properly closed containers.

iv) Solar radiation : Store in opaque containers (preferably stainless steel or amber glass)

vi) Vibration : Store in strong, properly closed containers.

c) How to preserve the integrity of the substance using:

i) Stabilizers : Store under a nitrogen blanket if possible.

ii) Antioxidants : An antioxidant may be added; see regulations in force.

d) Other points:

i) Ventilation requirements: See regulations in force. Good overall ventilation should be sufficient to limit the operator's exposure to molecules suspended in the air.

ii) the specific design of storage rooms and tanks : See regulations in force.

iii) maximum storable quantities : See regulations in force.

iv) packaging compatibility : Avoid PVC.

Section 8: Exposure Controls/Personal Protection

Control Parameters

Occupational Exposure Limits (INRS, ND2098, Directive 91/322/EC and 200/39/EC):

If this product contains ingredients involving exposure limits, it may be necessary to carry out regular tests on the atmosphere in the work area as well as on people and other living organisms, to determine the effectiveness of the ventilation, or other checks, or assess the need to use respirators. It is important to refer to European standard EN 689 which gives the methods for assessing exposure to chemical agents by inhalation and national general policy documents relating to the methods for determining dangerous substances.

Exposure Control

Technical Control:	Maintain concentration levels in the air below the occupational exposure limits defined in the standards. Utilize localized extraction equipment. Make use of mechanical handling equipment to reduce human contact with the products.
Environmental Protection:	Comply with local environmental protection laws.
Personal Protection:	Eye and face – Protective glasses or goggles should be worn. Skin – Waterproof gloves that are resistant to essential oils and comply with an approved standard.
Respiratory:	Not generally necessary if the area is well-ventilated (unless otherwise indicated).
Heat Exposure:	Exposure to a heat flux from a fire or explosion can cause burns of varying degrees, depending on the distance from the heat source. It is essential to wear appropriate protective equipment as well as an autonomous respiratory protection device. If necessary refer to the website: www.ilo.org

Section 9: Physical and Chemical Properties

Appearance:	Liquid
Colour:	Colourless to yellow
Odour:	Fresh, resinous and balsamic
Flash Point:	+45°C
Specific Gravity:	0.900 – 0.920 at 20°C
Solubility:	Soluble in alcohol, insoluble in water
Refractive Index:	1.467 – 1.472 at 20°C
Optical Rotation:	-30° to -25°

Section 10: Stability and Reactivity Data

Chemical Stability: This product is shock-, vibration- and pressure-resistant under normal usage conditions. Exposure to light or heat may cause oxidation.

Do not heat to a high temperature. Do not expose closed containers to direct sunlight. Keep away from ignition sources.

Conditions

to Avoid: The product does not decompose under normal usage conditions.

Section 11: Toxicological Information

Toxicology: Oral ingestion in rats
Dermal application in rabbits
Effect dose: LD50 org.
LD50 derm.
Inhalation LC50
Cause serious eye irritation.
May cause an allergic skin reaction.
May be fatal if swallowed and enters airways.

Section 12: Ecological Information

Eco-toxicity: Very toxic to aquatic life with long lasting effects.
Exposure Time Method: Acute Fish Toxicity: 96h
Acute Daphnia Toxicity: 48h
Effect Dose: LC50
EC50

Section 13: Disposal Considerations

Waste Disposal: In accordance with local regulations.
Dispose in accordance with local, state and federal regulations.

Waste Treatment Method: Do not discharge into drainage systems or watercourses.
Waste should be recycled or disposed of according to the legislation in force, preferably by an approved recycling or waste treatment company.
Do not pollute the soil or water; do not dispose of waste in the environment.
Empty containers completely. Do not remove labels. Use an approved waste disposal company.

Section 14: Transport Information

ADR*: Comply with international dangerous goods regulations in force.

ADR/RID Class

Packing group: 1272

Land transport ADR/RID (Ruling on transport of dangerous goods - road and train)

III

3

Marine pollutant No

N° UN

Dispatch Name : HUILE DE PIN

IMDG Class

Packing group: 1272

Maritime transport IMDG (Ruling on transport of dangerous goods)

III

3

N° UN

Dispatch Name : PINE OIL

ICAO/IATA Class

Packing group: 1272

Air transport ICAO-TI and IATA-DGR

III

3

N° UN

Dispatch Name : PINE OIL

Specific precautions for the user

Guidelines on loading goods for carriage by road:

Precautions relating to foodstuffs, other consumer goods and animal feed.

During loading operations, smoking is prohibited in and around the vehicles.

Code Tunnel: A,B,C,D

Section 15: Other Regulatory Information

Specific health, safety and environment regulations/legislation

Chemical safety assessment

a) Special provisions: Legislation relating to facilities classified for environmental protection purposes (ICPE) in France.

b) Notes: The regulatory information given in this section is intended merely as a reminder of the main provisions that apply specifically to the product covered by the MSDS.

The original EU texts mentioned are updated and transcribed into national law.

You are recommended to refer to all local, national and international measures and provisions that might apply. You are alerted to the possible existence of provisions other than those referred to in this document.

Section 16: Other Information

Disclaimer:

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Plant's Power be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Plant's Power has been advised of the possibility of such damages.
