



SDS according to Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), Annex II-EU

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

Date issued 05.08.2014

1.1. Product identifier

Product name Hard Wax Oil

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

Use of the substance/preparation Floor oil.

1.3. Details of the supplier of the safety data sheet

Company name Arboritec AB
 Postal address Olof Wijksväg 9
 Postcode SE-444 65
 City Jörlanda
 Country Sverige
 Tel 0303-563 30
 Fax 0303-563 32
 E-mail post@arboritec.com
 Website http://www.arboritec.com
 Contact person Jörgen Kaldemark

1.4. Emergency telephone number

Emergency telephone In case of medical emergency call:112

SECTION 2: Hazards identification

2.1. Classification of substance or mixture

Classification according to 67/548/EEC or 1999/45/EC R66
 Classification according to Regulation (EC) No 1272/2008 [CLP/GHS] EUH 066;

2.2. Label elements

R-phrases R66 Repeated exposure may cause skin dryness or cracking.
 S-phrases S2 Keep out of the reach of children.
 S24 Avoid contact with skin.
 S46 If swallowed, seek medical advice immediately and show this container or label.
 S56 Dispose of this material and its container to hazardous or special waste collection point.
 Composition on the label Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics:30 - 40 %, Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics:20 - 30 %
 Hazard statements EUH 066 Repeated exposure may cause skin dryness or cracking.
 Precautionary statements P101 If medical advice is needed, have product container or label at hand.
 P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
 P501 Innehållet/behållaren lämnas till godkänd mottagare av farligt avfall.

2.3. Other hazards

Other hazards When spray applying see section 8.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	Identification	Classification	Contents
Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics	EC no.: 927-285-2 Registration number: 01-2119480162-45-0000	Xn; R65,R66 Asp. tox 1; EUH 066; H304;	30 - 40 %
		Note : Det finns inga inter, Det finns inga inter	
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	CAS no.: 64742-48-9 EC no.: 919-857-5 Index no.: 649-327-00-6 Registration number: 01-2119463258-33	Flam. Liq. 3;H226; STOT SE3;H336; Asp. tox 1;H304;	20 - 30 %

SECTION 4: First aid measures

4.1. Description of first aid measures

General	Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.
Inhalation	Use with adequate ventilation. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice. Get medical advice/attention.
Skin contact	Remove/Take off immediately all contaminated clothing. IF ON SKIN: Wash with plenty of soap and water. Do NOT use solvents or thinners. Wash skin thoroughly with soap and water.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell.
Ingestion	Do NOT induce vomiting. Risk of aspiration or chemical pneumonia. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Recommended extinguishing media : alcohol resistant foam, CO2, powders, water spray. Do not use water jet.

5.2. Special hazards arising from the substance or mixture

Fire and explosion hazards Fire will produce dense black smoke. Decomposition products can be hazardous. At high temperatures create: Carbon monoxide (CO), carbon dioxide (CO2), smoke, nitrogen gases (NOx).

5.3. Advice for firefighters

Personal protective equipment	Wear respiratory protection.
Other Information	Eliminate all ignition sources if safe to do so. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	See section 7 and 8.
Personal protection measures	In case of inadequate ventilation wear respiratory protection. Wear fire / flame resistant / retardant clothing. Use personal protective equipment as required. Wear cold insulating gloves / face shield / eye protection. Wear protective gloves / protective clothing / eye protection / face protection. Avoid breathing dust / fume / gas / mist / vapours / spray. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

6.2. Environmental precautions

Environmental precautionary measures	Collect spillage. Avoid release to the environment. If the product contaminates lakes, rivers or sewers, inform appropriate authorities in accordance with local regulations.
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6.3. Methods and material for containment and cleaning up

Cleaning method	Keep away from sources of ignition and ventilate the area. Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent; avoid use of solvents.
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6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Handling	Vapours may form explosive mixtures with air. Avoid spilling, skin- and eye contact. Avoid breathing dust / fume / gas / mist / vapours / spray. Avoid breathing dust.
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Protective Safety Measures

Protective Safety Measures	Smoking, eating and drinking should be prohibited in application area. Remove contaminated clothing and protective gear before you get to an area where meals are taken.
Safety Measures To Prevent fire	Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. Use only non-sparking tools.
Additional information	For personal protection see Section 8. Never use pressure to empty : container is not a pressure vessel.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Store in accordance with applicable regulations for good chemical practice. Keep only in original container. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Protect from sunlight. Store in a dry place. Tillse att gällande arbetsmiljölågstiftning följs.
Conditions To Avoid	Keep away from heat / sparks / open flames / hot surfaces. — No smoking.

Protect from sunlight. Keep away from oxidizing agents, from strongly alkaline and strongly acid materials. Prevent unauthorized access.

Conditions for safe storage

Storage Temperature Value: 5-25 Celsius

7.3. Specific end use(s)

Recommendations Do not handle until all safety precautions have been read and understood.

Specific end users

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure limit values

Substance	Identification	Value	TWA Year
Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics	EC no.: 927-285-2 Registration number: 01-2119480162-45-0000	8-hour TWA: 350 mg/m3 National Occupational Exposure Limit, AFS , for n-paraffin 15 min.: 500 mg/m3 National Occupational Exposure Limit, AFS , for n-paraffin	1989

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2%aromatics	CAS no.: 64742-48-9 EC no.: 919-857-5 Index no.: 649-327-00-6 Registration number: 01-2119463258-33	8-hour TWA: 4 mg/m3 15 min.: 12 mg/m3 15 min	
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Substance	Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics
Letter Code	Det fi
Appropriate engineering controls	On suspicion that the occupational exposure limit is exceeded, measurement of the concentration on the work should be done.
Technical measures to prevent exposure	Good general ventilation. Use local exhaust at least in case of the manual handling indoors.
Recommended type of equipment	At risk of exceeding the occupational exposure limit, use half-or full face mask with gas filter A.
Suitable gloves type	Use gloves of for example Viton, 4h
Eye protection	At the risk of splashing, close-fitting goggles or face shield.
Skin protection (except hands)	Wear clothing with long sleeves and legs.
Additional skin protection measures	Wash hands after using.

DNEL / PNEC from substances

Substance	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2%aromatics
DNEL	Group: Worker Exposure route: Dermal Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 208 mg/kg bw/day
DNEL	Group: Worker Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 871 mg/m3
DNEL	Group: Consumer Exposure route: Dermal Exposure frequency: Long term (repeated)

	Type of effect: Systemic effect Value: 125 mg/kg bw/day
DNEL	Group: Consumer Exposure route: Inhalation Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 900 mg/m ³
DNEL	Group: Consumer Exposure route: Oral Exposure frequency: Long term (repeated) Type of effect: Systemic effect Value: 125 mg/kg bw/day

8.2. Exposure controls

Precautionary measures to prevent exposure

Appropriate engineering controls	Use with adequate ventilation. If possible this should be achieved by local extraction and good exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory equipment.
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Respiratory protection

Respiratory protection	Respiratory protection with gas filter (brown A) must be used if air concentration exceeds acceptable level (OEL).
Mask type	When spraying, use half-or full face mask with filter P2 (Iib) to spray.

Hand protection

Hand protection	Wear cold insulating gloves / face shield / eye protection.
Skin-/ hand protection, long term contact	For prolonged or repeated contact use gloves made of neoprene (1-4h) or nitrile (>4h).
Suitable materials	Barrier creams may help to protect the skin, but they should however not be used once exposure has occurred.

Eye / face protection

Suitable Eye Protection	Wear cold insulating gloves / face shield / eye protection.
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Skin protection

Skin protection (except hands)	Wear fire / flame resistant / retardant clothing.
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Exposure controls

Safety measures for consumer use of the chemical	Read label before use.
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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Liquid.
Odour	As Solvent.
Comments, Odour limit	Not applicable.
Comments, pH (as supplied)	Not determined.
Comments, pH (aqueous solution)	Not determined .
Comments, Melting point / melting range	Not applicable
Comments, Boiling point / boiling range	Not applicable.
Flash point	Value: 62 °C
Comments, Evaporation rate	Not determined.
Flammability (solid, gas)	Not determined
Lower explosion limit with unit of measurement	0,5%
Upper explosion limit with units of	5%

measurement	
Comments, Explosion limit	Not applicable.
Comments, Vapour pressure	Not determined.
Comments, Vapour density	Not determined.
Specific gravity	Value: 0,8 g/ml Method of testing: ASTM6450 Test temperature: 23 °C
Solubility in water	Non-soluble.
Comments, Partition coefficient: n-octanol / water	Not applicable.
Viscosity	Value: > 20,5 mm ² /s Test temperature: 40 °C
Explosive properties	Not explosive.
Oxidising properties	Not applicable.

9.2. Other information

Content Of Voc	Value: 520 g/l Comments: Initial boiling point less than or equal to 250°C
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	No reactive.
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10.2. Chemical stability

Stability	Stable under recommended storage and handling conditions (see section 7). Risk of self-ignition in porous materials such as insulation, rags and the like.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	No dangerous if handled according to Technical Information.
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10.4. Conditions to avoid

Conditions to avoid	No applicable.
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10.5. Incompatible materials

Materials to avoid	Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reaction.
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10.6. Hazardous decomposition products

Hazardous decomposition products	When exposed to high temperature may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, oxides of nitrogen.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological data for substances

Substance	Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics
LD50 oral	Value: > 5000 mg/kg bw Animal test species: Rat Test reference: OECD TG 401
LD50 dermal	Value: > 5000 mg/kg bw Animal test species: Kanin Test reference: OECD TG 402
LC50 inhalation	Value: > 5000 mg/m ³ Animal test species: Rat Test reference: OECD TG 403
Acute toxicity	Inhalation: Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Skin: Prolonged or repeated skin contact may cause irritation, dry skin and

	cracked skin. Eye: May cause irritation in eyes. Ingestion: Pneumonia may occur after a few hours to days, if the product by swallowing or vomiting is drawn into the respiratory tract. Already a few milliliters in the lungs can cause pneumonia. May cause vomiting, stomach pains and otherwise same symptom as inhalation.
Substance	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
LD50 dermal	Value: > 5000 mg/kg Animal test species: Rabbit

Potential acute effects

Inhalation	Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system.
Skin contact	Prolonged or repeated skin contact may cause irritation, dry skin, cracked skin and possibly eczema.
Eye contact	May cause irritation in eyes.
Ingestion	Ingestion may cause nausea and vomiting. Pneumonia may occur if the product by swallowing or vomiting is drawn into the respiratory tract.
Skin corrosion / irritation, other information	No information available.
Aspiration hazard, comments	When applying see section 8.
Eye damage or irritation other info	If splashed in the eyes, the liquid may cause irritation and reversible damage.

Delayed effects / repeated exposure

General respiratory or skin sensitisation	Prolonged or repeated contact may defat the skin, resulting in non-allergic contact eczema and absorption through the skin.
STOT-single exposure	No information available.
STOT-repeated exposure	No information available.

Carcinogenic, Mutagenic or Reprotoxic

Carcinogenicity human experience	No information is available.
Germ Cell Mutagenicity, human experience	No information available.
Reproductive toxicity	No information available.

SECTION 12: Ecological information

12.1. Toxicity

Toxicological data for substances

Substance	Hydrocarbons, C11-C14, isoalkanes, cyclics, <2% aromatics
Acute aquatic, fish	Value: > 1000 mg/l Method of testing: LC50 Duration: 96h
Acute aquatic, Daphnia	Value: > 1000 mg/l Method of testing: EC50 Duration: 48h
Water solubility	Comments: water insoluble.
Biodegradability	Comments: The product is easily biodegradable by microorganisms according to the OECD 301F. Mostly evaporates and floats on water when spill or release. At penetration in deeper soil, the evaporation is considerably more difficult.
Bioconcentration factor (BCF)	Value: 2,16 Comments: Log Pow: 6-7
Substance	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Acute aquatic, fish	Value: > 1000 mg/l

	Method of testing: LC50 Species: Oncorhynchus mykiss Duration: 96h
Acute aquatic, algae	Value: > 1000 mg/l Method of testing: IC50 Species: Pseudokirchneriella subcapitata Duration: 72h
Bioconcentration factor (BCF)	Comments: Log Pow: 5-6,7

12.2. Persistence and degradability

Persistence and degradability description	Not determined.
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12.3. Bioaccumulative potential

Bioaccumulative potential	Not determined.
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12.4. Mobility in soil

Mobility	Not determined.
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12.5. Results of PBT and vPvB assessment

PBT assessment results	Not classified as PBT / vPvB of current EU criteria.
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12.6. Other adverse effects

Other adverse effects / Remarks	None known.
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SECTION 13: Disposal considerations

13.1. Waste treatment methods

Specify the appropriate methods of disposal	Avoid release to the environment. Collect spillage. Wastes and empty containers should be disposed of in accordance with regulations made under the Control of Pollution Act and the Environmental Protection Act.
Product classified as hazardous waste	Yes
EWC waste code	EWC: 08 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS, National waste code: 01, National wastegroup: 11

SECTION 14: Transport information

14.1. UN number

Comments	Not dangerous goods. Transport in accordance with national law and ADR for road, RID for rail, IMDG for sea and ICAO / IATA for air. For complete information on transport, see transport document.
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14.2. UN proper shipping name

ADR	---
RID	---
IMDG	---
ICAO/IATA	---

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

IMDG Marine pollutant	No
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14.6. Special precautions for user

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

SECTION 15: Regulatory information

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

Legislation and regulations	<p>The labeling of the product according to EC directives 67/548/EEC, 1999/45/EC, see section 2.</p> <p>Classification and labeling of substances according to Regulation (EC) 1272/2008 (CLP) is in section 2.</p> <p>Classification and labeling of substances under Directive 67/548/EC, 1999/45/EC, see section 3.</p> <p>Classification and labeling of substances according to Regulation (EC) 1272/2008 (CLP) is in section 3.</p> <p>Safety data sheet is designed according to EU Commission Regulation No. 1907/2006.</p>
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15.2. Chemical safety assessment

Chemical safety assessment performed	No
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SECTION 16: Other information

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]	; EUH 066;
List of relevant R-phrases (under headings 2 and 3).	R65 Harmful: may cause lung damage if swallowed. R66 Repeated exposure may cause skin dryness or cracking.
List of relevant H-phrases (Section 2 and 3).	EUH 066 Repeated exposure may cause skin dryness or cracking. H304 May be fatal if swallowed and enters airways. H226 Flammable liquid and vapour. H336 May cause drowsiness or dizziness.
Version	1
Responsible for safety data sheet	Arboritec AB
Comments	The information of this SDS is based on the present state of our knowledge and on current EU and national laws. The product is not to be used for other purposes than those specified under section 1 without first obtaining written handling instruction. It is always the responsibility of the user to take all necessary steps in order to fulfill the demand laid down in the local rules and legislation. The information in this SDS is meant as a description of the safety requirements of our product : it is not to be considered as a guarantee of the products' properties.