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MATERIAL SAFETY DATA SHEET

PUFFIN THINNER STOVING - HIGHTEMP

TRADE NAME : PUFFIN THINNER STOVING - HIGHTEMP

1. IDENTIFICATION OF SUBSTANCE AND COMPANY

Identification of Substance or Preparation

Chemical description : Solvent

Recommendation : Dilution

Company / Undertaking Identificaation Supplier

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2. HAZARD IDENTIFICATION

Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226

Skin Irrit. 2, H315

Eye Dam. 1, H318

STOT SE 3, H335

STOT SE 3, H336

Asp. Tox. 1, H304

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended

See Section 11 for more detailed information on health effects and symptoms

Label elements

Hazard pictograms :



Signal word : **Danger.**

Hazard statements:

H226 - Flammable liquid and vapour.

H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H304 - May be fatal if swallowed and enters airways.

H335 - May cause respiratory irritation.

H336 - May cause drowsiness or dizziness.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

General : P102 - Keep out of reach of children

Prevention :

P280 - Wear protective gloves. Wear eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P271 - Use only outdoors or in a well-ventilated area.

P273 - Avoid release to the environment.

P261 - Avoid breathing vapour or spray.

Response:

P391 - Collect spillage.

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.

P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage:

P403 - Store in a well-ventilated place.

P235 - Keep cool.

Disposal:P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients: hydrocarbons, C9, aromatics, (<0.1% Benzene) xylenebutan-1-ol

Supplemental label elements: Not applicable

Annex XVII - Restrictions

**on the manufacture, placing
on the market and use of certain
dangerous substances,
mixtures and articles**

: Not applicable

Special packaging requirements

**Containers to be fitted with
child-resistant fastenings**

: Yes, applicable.

Tactile warning of danger

: Yes, applicable

Other hazards

**Other hazards which do not
result in classification**

: None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS:

mixtures : mixture

Product/Ingredients name	Identifiers	Weight %	Regulation (EC) No. 1272/2008 [CLP]	Type
hydrocarbons, C9, aromatics, (<0. 1% Benzene)	REACH #: 01-2119455851-35 EC: 918-668-5 CAS: 64742-95-6	≥50 - ≤75	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
Xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - ≤25	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304	[1] [2]
butan-1-ol	REACH #: 01-2119484630-38 EC: 200-751-6 CAS: 71-36-3 Index: 603-004-00-6	≥10 - <25	Flam. Liq. 3, H226 Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 STOT SE 3, H336	[1]
Ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	<10	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	[1] [2]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

[6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

4. FIRST AID MEASURES

Description of first aid measures

- 1. General :** In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- 2. Eye contact :** Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- 3. Inhalation :** Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- 4. Skin contact :** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- 5. Ingestion :** If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 6. Protection of first-aiders :** No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Most important symptoms and effects, both acute and delayed.

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments : No specific treatment.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media : Do not use water jet.

Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

Advice for firefighters

Special protective actions for fire-fighters : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses

Special protective equipment for fire-fighters : Appropriate breathing apparatus may be required

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions: Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

Methods and material for containment and cleaning up: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Preferably clean with a detergent. Avoid using solvents.

Reference to other sections : See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

7. HANDLING AND STORAGE

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations 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. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses. Information on fire and explosion protection Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

Conditions for safe storage, including any incompatibilities :

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Recommendations: Not available

Industrial sector specific solutions : Not available

8. EXPOSURE CONTROLS PERSONAL PROTECTION

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Xylene	EU OEL (Europe, 2/2017). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 442 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene	EU OEL (Europe, 2/2017). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 100 ppm 8 hours. TWA: 442 mg/m ³ 8 hours. STEL: 200 ppm 15 minutes. STEL: 884 mg/m ³ 15 minutes.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required

DNELs/DMELs

Product/ingredient name	Exposure	Value	Population	Effects	
hydrocarbons, C9, aromatics, (<0.1% Benzene) xylene	Long term Dermal	25 mg/kg bw/day	Workers	Systemic	
	Long term Inhalation	150 mg/m ³	Workers	Systemic	
	Long term Dermal	11 mg/kg bw/day	Consumers	Systemic	
	Long term Inhalation	32 mg/m ³	Consumers	Systemic	
	Long term Oral	11 mg/kg bw/day	Consumers	Systemic	
	Short term Inhalation	289 mg/m ³	Workers	Systemic	
	Short term Inhalation	289 mg/m ³	Workers	Local	
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic	
	Long term Inhalation	77 mg/m ³	Workers	Systemic	
	Long term Dermal	108 mg/kg bw/day	Consumers	Systemic	
	Long term Inhalation	14.8mg/m ³	Consumers	Systemic	
	Long term Oral	1.6 mg/kg bw/day	Consumers	Systemic	
	butan-1-ol	Long term Inhalation	310 mg/m ³	Workers	Local
		Long term Oral	3.125 mg/ kg bw/day	Consumers	Systemic
ethylbenzene	Long term Inhalation	55 mg/m ³	Consumers	Local	
	Short term Inhalation	293 mg/m ³	Workers	Local	
	Long term Dermal	180 mg/kg bw/day	Workers	Systemic	
	Long term Inhalation	77 mg/m ³	Workers	Systemic	
	Long term Inhalation	15 mg/ m ³	Consumers	Systemic	
	Long term Oral	1.6 mg/kg bw/day	Consumers	Local	

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
Xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment Plant	6.58 mg/l	-
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-
butan-1-ol	Fresh water	0.082 mg/l	-
	Marine	0.0082 mg/l	-
	Sewage Treatment Plant	2476 mg/l	-
	Fresh water sediment	0.178 mg/kg dwt	-
	Marine water sediment	0.0178 mg/kg dwt	-
	Soil	0.015 mg/kg dwt	-
ethylbenzene	Fresh water	0.1 mg/l	-
	Marine	0.01 mg/l	-
	Sewage Treatment Plant	9.6 mg/l	-
	Fresh water sediment	13.7 mg/kg dwt	-
	Soil	2.68 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-

Exposure controls

Appropriate engineering controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Use safety eyewear designed to protect against splash of liquid

Skin protection

Gloves: There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Wear suitable gloves tested to EN374.

May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, butyl rubber, Viton®, Barricade, CPF 3, Responder, PVC

Not recommended, gloves(breakthrough time) < 1 hour: PE

Recommended, gloves(breakthrough time) > 8 hours: 4H, Teflon, nitrile rubber, polyvinyl alcohol (PVA)

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Body protection : Personnel should wear antistatic clothing made of natural fibres or of hightemperature-resistant synthetic fibres.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.

Environmental exposure controls : Do not allow to enter drains or watercourses.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Colour	: Clear
Odour	: Characteristic
Odour threshold	: Not Applicable
PH	: Not Applicable
Melting point	: Not Applicable
Initial Boiling point and boiling range	: Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 155.39°C (311.7°F)
Flash point	: Closed cup: 25°C
Evaporation rate	: Highest known value: 0.84 (ethylbenzene) Weighted average: 0.66 compared with butyl acetate
Flammability (solid, gas)	: Not applicable
Upper/Lower flammability or explosivelimits	: 0.8 - 11.3%
Vapour pressure	: Highest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene). Weighted average: 0.95 kPa (7.13 mm Hg) (at 20°C)
Vapour density	: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.29 (Air = 1)
Density	: 0.86 g/cm ³
Solubility(ies)	: Insoluble in the following materials: cold water and hot water.
Partition coefficient	
: noctanol/water	: Not available
Auto-ignition temperature.	: Lowest known value: 280 to 470°C (536 to 878°F) (hydrocarbons, C9, aromatics, (<0.1% Benzene)).
Decomposition temperature	: Not available
Viscosity	: Not available.
Explosive properties	: Not available
Oxidising properties	: Not available

Other information

No additional information.

10. STABILITY AND REACTIVITY

Reactivity: No specific test data related to reactivity available for this product or its ingredients.

Chemical Stability : Stable under recommended storage and handling conditions (see Section 7).

Possibility of Hazardous reaction : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids

Hazardous Decomposition Products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour 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. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage. Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Acute toxicity

Product/Ingredient name	Result	Species	Dose	Exposure	
Xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours	
	LD50 Oral	Rat	4300 mg/kg	-	
	TDLo Dermal	Rabbit	4300 mg/kg	-	
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-	
	ethylbenzene	LC50 Inhalation Gas.	Rabbit	4000 ppm	4 hours
		LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-	

Conclusion/Summary : Not available.

Acute toxicity estimates

Route	ATE value
Oral	3333.3 mg/kg
Dermal	5866.7 mg/kg
Inhalation (vapours)	44 mg/l

Irritation/ corrosion

Conclusion/Summary : Not available.

Sensitisation

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
hydrocarbons, C9, aromatics, (<0.1% Benzene)	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects
Xylene	Category 3	Not applicable.	Respiratory tract irritation
butan-1-ol	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	Not determined	hearing organs

Aspiration hazard

Name	Result
hydrocarbons, C9, aromatics, (<0.1% Benzene)	ASPIRATION HAZARD - Category 1
Xylene	ASPIRATION HAZARD - Category 1
Ethylbenzene	ASPIRATION HAZARD - Category 1

Other information : Not available.

12. ECOLOGICAL INFORMATION

Toxicity

There are no data available on the mixture itself.

Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
hydrocarbons, C9, aromatics, (<0.1% Benzene)	Acute EC50 <10 mg/l	Daphnia	48 hours
ethylbenzene	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
	Acute EC50 7.2 mg/l	Algae	48 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours

Conclusion/Summary : Water polluting material. May be harmful to the environment if released in large quantities. This material is toxic to aquatic life with long lasting effects.

Persistence/degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
hydrocarbons, C9, aromatics, (<0.1% Benzene)	-	-	Not Readily
Xylene	-	-	Readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
hydrocarbons, C9, aromatics, (<0.1% Benzene)	-	10 to 2500	High
Xylene	3.12	8.1 to 25.9	Low
butan-1-ol	1	-	Low
Ethylbenzene	3.6	-	Low

Mobility in soil

Soil/water partition: Not available.

coefficient (KOC)

Mobility : Not available.

Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

Other adverse effects :No known significant effects or critical hazards.

13.DISPOSAL CONSIDERATION

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European wastecatalogue (EWC) : 08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging CEPE Paint Guidelines	15 01 10*	European waste catalogue (EWC) packaging containing residues of or contaminated by hazardous substances
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Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

	ADR/RID	ADN	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	Paint related material	Paint related material	Paint related material. Marine pollutant (hydrocarbons, C9, aromatics, (<0.1% Benzene))	Paint related material
Transport hazard class(es)	3 	3 	3 	3
Packing group	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR / RID : Tunnel code (D/E)

Hazard identification number 30

ADN : The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules** F-E, S-E

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user : transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not applicable.

15. REGULATORY INFORMATION

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

VOC for Ready-for-Use Mixture : Not applicable.

Europe inventory : At least one component is not listed.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

International regulations.**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol (Annexes A, B, C, E) Not listed.

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

16. OTHER INFORMATION**Key to abbreviations :**

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

References : Not available.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008**[CLP/GHS]**

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Dam. 1, H318	Calculation method
STOT SE 3, H335	Calculation method
STOT SE 3, H336	Calculation method
Asp. Tox. 1, H304	Expert judgment
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.

H337	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Acute Tox. 4, H312	ACUTE TOXICITY (dermal) - Category 4
Acute Tox. 4, H332	ACUTE TOXICITY (inhalation) - Category 4
Aquatic Chronic 2, H411	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Asp. Tox. 1, H304	ASPIRATION HAZARD - Category 1
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3, H335	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3

NOTES

PT.INDOWIJAYA SAKTI TEGUH has a responsibility to take reasonable care for our own health and safety and the health and safety of others who may be affected by our acts or omissions. This M.S.D.S. at the date of issue has Health and Safety Information of the product, and how to safely handle and use this product in the workplace.

All information given is our best knowledge, and because we cannot anticipate or control the conditions of the end use of this products, prior to usage, each user must determine by reviewing this M.S.D.S, Safe Handling and usage of this products in the Workplace.

PT.INDOWIJAYA SAKTI TEGUH believe this information to be reliable, and in good faith, but no guarantees or warranties of any kind are made as to its accuracy, suitability to particulate applications due to variations in methods, conditions and equipment. When PT.INDOWIJAYA SAKTI TEGUH provides information and service involving skill, assistance, judgment, recommendations, and or advise this is done on the best of our knowledge only; information is not be relied upon.

Full scale testing and performance of the product is the responsibility of the end user. For further information or classification of certain points to ensure that the user has made a proper assessment and reasonable precautions have been applied, please contact PT.INDOWIJAYA SAKTI TEGUH.