Lacq Houtteer Black / Brown

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: Lacq Houtteer Black / Brown

Other means of identification:

Non-applicable

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

Relevant uses: Paints and varnishes

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Vliegenthart B.V.
Zuiderhavenweg 42
4000 HH Tiel - Gelderland - Netherlands
Phone: +31 344 633336
info@vliegenthart.com

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GB CLP Regulation:

Classification of this product has been carried out in accordance with GB CLP Regulation.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Skin Irrit. 2: Skin irritation, Category 2, H315
Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

GB CLP Regulation:

Warning

Hazard statements:

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand.
P102: Keep out of reach of children.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264: Wash thoroughly after use.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P501: Dispose of the contents and/or its container using the separate collection system in your municipality.

Supplementary information:

Contains Rosin.

Substances that contribute to the classification

Rosin (CAS: 8050-09-7)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Chemical description: Mixture based on hydrocarbons and additives

Components:

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 64742-81-0	**Kerosine (petroleum), hydrodesulfurized** Aquatic Chronic 3: H412; Asp. Tox. 1: H304; Flam. Liq. 3: H226; Skin Irrit. 2: H315 - Danger	**10 - <25 %**
CAS: 8050-09-7	**Rosin** Skin Sens. 1: H317 - Warning	**1 - <3 %**
CAS: 15956-58-8	**2-ethylhexanoic acid, manganese salt** Aquatic Chronic 2: H411; Eye Irrit. 2: H319; Repr. 2: H361d; STOT RE 2: H373 - Warning	**1 - <3 %**
CAS: 85203-81-2	**Hexanoic acid, 2-ethyl-, zinc salt, basic** Aquatic Chronic 3: H412; Eye Irrit. 2: H319; Repr. 2: H361d - Warning	**0,3 - <1 %**
CAS: 22464-99-9	**2-ethylhexanoic acid, zirconium salt** Repr. 2: H361d - Warning	**0,3 - <1 %**
CAS: 149-57-5	**2-ethylhexanoic acid** Repr. 2: H361d - Warning	**0,1 - <0,3 %**
CAS: 136-51-6	**calcium bis(2-ethylhexanoate)** Eye Dam. 1: H318; Repr. 2: H361d - Danger	**0,1 - <0,3 %**

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

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SECTION 5: FIREFIGHTING MEASURES (continued)

Product is non-flammable under normal conditions of storage, manipulation and use, but the product contains flammable substances. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...).

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

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SECTION 7: HANDLING AND STORAGE (continued)

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5 ºC

Maximum Temp.: 35 ºC

Maximum time: 24 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

Identification	Occupational exposure limits		
Rosin	WEL (8h)		0.05 mg/m³
CAS: 8050-09-7	WEL (15 min)		0.15 mg/m³
Dipropylene Glycol Methyl Ether	WEL (8h)	50 ppm	308 mg/m³
CAS: 34590-94-8	WEL (15 min)		

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Rosin	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 8050-09-7	Dermal	Non-applicable	Non-applicable	2.131 mg/kg	Non-applicable
EC: 232-475-7	Inhalation	Non-applicable	Non-applicable	Non-applicable	10 mg/m³
2-ethylhexanoic acid, manganese salt	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 15956-58-8	Dermal	Non-applicable	Non-applicable	5.91 mg/kg	Non-applicable
EC: 240-085-3	Inhalation	Non-applicable	Non-applicable	1.19 mg/m³	Non-applicable
Hexanoic acid, 2-ethyl-, zinc salt, basic	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 85203-81-2	Dermal	Non-applicable	Non-applicable	6.41 mg/kg	Non-applicable
EC: 286-272-3	Inhalation	Non-applicable	Non-applicable	20.83 mg/m³	Non-applicable
2-ethylhexanoic acid, zirconium salt	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 22464-99-9	Dermal	Non-applicable	Non-applicable	6.49 mg/kg	Non-applicable
EC: 245-018-1	Inhalation	Non-applicable	Non-applicable	32.97 mg/m³	Non-applicable
2-ethylhexanoic acid	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 149-57-5	Dermal	Non-applicable	Non-applicable	2 mg/kg	Non-applicable
EC: 205-743-6	Inhalation	Non-applicable	Non-applicable	14 mg/m³	Non-applicable
calcium bis(2-ethylhexanoate)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 136-51-6	Dermal	Non-applicable	Non-applicable	5.67 mg/kg	Non-applicable
EC: 205-249-0	Inhalation	Non-applicable	Non-applicable	39.98 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Rosin	Oral	Non-applicable	Non-applicable	1.065 mg/kg	Non-applicable
CAS: 8050-09-7	Dermal	Non-applicable	Non-applicable	1.065 mg/kg	Non-applicable
EC: 232-475-7	Inhalation	Non-applicable	Non-applicable	Non-applicable	Non-applicable

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-ethylhexanoic acid, manganese salt	Oral	Non-applicable	Non-applicable	4.1 mg/kg	Non-applicable
CAS: 15956-58-8	Dermal	Non-applicable	Non-applicable	2.96 mg/kg	Non-applicable
EC: 240-085-3	Inhalation	Non-applicable	Non-applicable	0.26 mg/m³	Non-applicable
Hexanoic acid, 2-ethyl-, zinc salt, basic	Oral	Non-applicable	Non-applicable	3.21 mg/kg	Non-applicable
CAS: 85203-81-2	Dermal	Non-applicable	Non-applicable	3.21 mg/kg	Non-applicable
EC: 286-272-3	Inhalation	Non-applicable	Non-applicable	10.42 mg/m³	Non-applicable
2-ethylhexanoic acid, zirconium salt	Oral	Non-applicable	Non-applicable	4.51 mg/kg	Non-applicable
CAS: 22464-99-9	Dermal	Non-applicable	Non-applicable	3.25 mg/kg	Non-applicable
EC: 245-018-1	Inhalation	Non-applicable	Non-applicable	8.13 mg/m³	Non-applicable
2-ethylhexanoic acid	Oral	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
CAS: 149-57-5	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
EC: 205-743-6	Inhalation	Non-applicable	Non-applicable	3.5 mg/m³	Non-applicable
calcium bis(2-ethylhexanoate)	Oral	Non-applicable	Non-applicable	2.83 mg/kg	Non-applicable
CAS: 136-51-6	Dermal	Non-applicable	Non-applicable	2.83 mg/kg	Non-applicable
EC: 205-249-0	Inhalation	Non-applicable	Non-applicable	9.86 mg/m³	Non-applicable

PNEC:

Identification				
Rosin	STP	1000 mg/L	Fresh water	0.002 mg/L
CAS: 8050-09-7	Soil	0 mg/kg	Marine water	0 mg/L
EC: 232-475-7	Intermittent	0.016 mg/L	Sediment (Fresh water)	0.007 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.001 mg/kg
2-ethylhexanoic acid	STP	71.7 mg/L	Fresh water	0.398 mg/L
CAS: 149-57-5	Soil	0.712 mg/kg	Marine water	0.04 mg/L
EC: 205-743-6	Intermittent	1 mg/L	Sediment (Fresh water)	4.74 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.474 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>>. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Protective gloves against minor risks	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Ocular and facial protection

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Viscous
Colour:	According to the markings on the package
Odour:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	>200 ºC (ASTM D 1120-72)
Vapour pressure at 25 ºC:	>554 Pa
Vapour pressure at 50 ºC:	Non-applicable *
Evaporation rate at 25 ºC:	Non-applicable *

Product description:

Density at 25 ºC:	915 kg/m³
Relative density at 25 ºC:	0.916
Dynamic viscosity at 25 ºC:	100 cP
Kinematic viscosity at 25 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	>20.5 mm²/s
Concentration:	Non-applicable *
pH:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Vapour density at 25 ºC:	Non-applicable *
Partition coefficient n-octanol/water 25 ºC:	Non-applicable *
Solubility in water at 25 ºC:	Non-applicable *
Solubility properties:	Insoluble in water
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	>100 ºC (Abel (CC))
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	>250 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
Other safety characteristics:	
Surface tension at 25 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Precaution	Precaution	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

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SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Naphtha (petroleum), hydrotreated heavy, < 0.1 % EC 200-753-7 (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Kerosine (petroleum), hydrodesulfurized	LD50 oral	5000 mg/kg	Rat
CAS: 64742-81-0	LD50 dermal	2100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Rosin	LD50 oral	4100 mg/kg	Rat
CAS: 8050-09-7	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
2-ethylhexanoic acid, manganese salt CAS: 15956-58-8	LD50 oral	2150 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Hexanoic acid, 2-ethyl-, zinc salt, basic CAS: 85203-81-2	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
2-ethylhexanoic acid CAS: 149-57-5	LD50 oral	3000 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
calcium bis(2-ethylhexanoate) CAS: 136-51-6	LD50 oral	2043 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
Kerosine (petroleum), hydrodesulfurized CAS: 64742-81-0	LC50	45 mg/L (96 h)	Pimephales promelas	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		
Rosin CAS: 8050-09-7	LC50	150 mg/L (96 h)	Brachydanio rerio	Fish
	EC50	238 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	185 mg/L (72 h)	Selenastrum capricornutum	Algae
2-ethylhexanoic acid, manganese salt CAS: 15956-58-8	LC50	270 mg/L (96 h)	N/A	Fish
	EC50	3 mg/L (48 h)	N/A	Crustacean
	EC50	61 mg/L (72 h)	N/A	Algae
Hexanoic acid, 2-ethyl-, zinc salt, basic CAS: 85203-81-2	LC50	100 mg/L (96 h)	Cyprinus carpio	Fish
	EC50	Non-applicable		
	EC50	Non-applicable		

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
2-ethylhexanoic acid, zirconium salt	LC50	270 mg/L (96 h)	N/A	Fish
CAS: 22464-99-9	EC50	Non-applicable		
	EC50	Non-applicable		
2-ethylhexanoic acid	LC50	180 mg/L (48 h)	Salmo gairdneri	Fish
CAS: 149-57-5	EC50	116.6 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	61 mg/L (72 h)	Scenedesmus subspicatus	Algae
calcium bis(2-ethylhexanoate)	LC50	270 mg/L (96 h)	N/A	Fish
CAS: 136-51-6	EC50	Non-applicable		
	EC50	Non-applicable		

Chronic toxicity:

Identification	Concentration		Species	Genus
2-ethylhexanoic acid, manganese salt	NOEC	0.6 mg/L	Oncorhynchus mykiss	Fish
CAS: 15956-58-8	NOEC	25 mg/L	Daphnia magna	Crustacean
Hexanoic acid, 2-ethyl-, zinc salt, basic	NOEC	0.199 mg/L	Oncorhynchus mykiss	Fish
CAS: 85203-81-2	NOEC	0.9 mg/L	Mya arenaria	Crustacean
2-ethylhexanoic acid, zirconium salt	NOEC	Non-applicable		
CAS: 22464-99-9	NOEC	25 mg/L	Daphnia magna	Crustacean
2-ethylhexanoic acid	NOEC	Non-applicable		
CAS: 149-57-5	NOEC	18 mg/L	Daphnia magna	Crustacean
calcium bis(2-ethylhexanoate)	NOEC	Non-applicable		
CAS: 136-51-6	NOEC	25 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Identification	Degradability		Biodegradability	
Rosin	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 8050-09-7	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	32 %
2-ethylhexanoic acid, zirconium salt	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 22464-99-9	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	99 %
2-ethylhexanoic acid	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 149-57-5	COD	2.11 g O2/g	Period	Non-applicable
	BOD5/COD	Non-applicable	% Biodegradable	Non-applicable
calcium bis(2-ethylhexanoate)	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 136-51-6	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	99 %

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SECTION 12: ECOLOGICAL INFORMATION (continued)

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Kerosine (petroleum), hydrodesulfurized CAS: 64742-81-0	BCF	130
	Pow Log	3.3
	Potential	High
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	BCF	
	Pow Log	2.96
	Potential	
2-ethylhexanoic acid CAS: 149-57-5	BCF	3
	Pow Log	2.64
	Potential	Low
calcium bis(2-ethylhexanoate) CAS: 136-51-6	BCF	
	Pow Log	2.96
	Potential	

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-ethylhexanoic acid, zirconium salt CAS: 22464-99-9	Koc	Non-applicable	Henry	2.94E-1 Pa·m³/mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
calcium bis(2-ethylhexanoate) CAS: 136-51-6	Koc	Non-applicable	Henry	2.94E-1 Pa·m³/mol
	Conclusion	Non-applicable	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances	Dangerous

Type of waste:

HP14 Ecotoxic, HP5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity, HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

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SECTION 15: REGULATORY INFORMATION (continued)

The Control of Major Accident Hazards Regulations 2015:

Section	Description	Lower-tier requirements	Upper-tier requirements
E2	ENVIRONMENTAL HAZARDS	200	500

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ....):

Shall not be used in:
—ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Texts of the legislative phrases mentioned in section 2:

H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.
H315: Causes skin irritation.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

GB CLP Regulation:

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Asp. Tox. 1: H304 - May be fatal if swallowed and enters airways.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Repr. 2: H361d - Suspected of damaging the unborn child.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure.

Classification procedure:

Skin Sens. 1: Calculation method
Aquatic Chronic 3: Calculation method
Skin Irrit. 2: Calculation method

Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

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SECTION 16: OTHER INFORMATION (continued)

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -