Safety data sheet
according to 29 CFR 1910.1200

PINTUBOAT AZUL 4120

SECTION 1: IDENTIFICATION

1.1 GHS Product identifier: PINTUBOAT AZUL 4120

Other means of identification:

Non-applicable

1.2 Recommended use of the chemical and restrictions on use:

Relevant uses: Paint. For industrial user only.

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

1.3 Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Pintuco
Autopista Medellín Bogotá Km 37 Vía Belén Rionegro Km 1
054040 Rionegro - Antioquia - Colombia
Phone.: 57 4 569 81 00
contacto@pintuco.com
http://www.pintuco.com

1.4 Emergency phone number: CISTEMA SURA Colombia to 018000 51 14 14, outside Colombia (0574) 4444578

SECTION 2: HAZARD(S) IDENTIFICATION

2.1 Classification of the substance or mixture:

29 CFR 1910.1200:

Classification of this product has been carried out in accordance with paragraph (d) of § 1910.1200.

Acute Tox. 4: Acute inhalation toxicity, Category 4, H332
Eye Irrit. 2A: Eye irritation, Category 2A, H319
Flam. Liq. 3: Flammable liquids, Category 3, H226
Skin Irrit. 2: Skin irritation, Category 2, H315

2.2 Label elements:

29 CFR 1910.1200:

Warning

Hazard statements:

Acute Tox. 4: H332 - Harmful if inhaled.
Eye Irrit. 2A: H319 - Causes serious eye irritation.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Irrit. 2: H315 - Causes skin irritation.

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+P378: In case of fire: Use ABC powder extinguisher to put it out.
P403+P235: Store in a well-ventilated place. Keep cool.
P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively.

2.3 Hazards not otherwise classified (HNOC):

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances:

Non-applicable

3.2 Mixtures:

Chemical description: Mixture composed of chemical products

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Components:

Remaining components are non-hazardous and/or present at amounts below reportable limits. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.Therefore, in accordance with Appendix D to § 1910.1200, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 8050-09-7	**Rosin**	**10 - <25 %**
CAS: 1317-39-1	**Dicopper oxide**	**2.5 - <10 %**
CAS: 78-83-1	**2-methylpropan-1-ol**	**2.5 - <10 %**
CAS: 1330-20-7	**Xylene**	**2.5 - <10 %**
CAS: 137-30-4	**Ziram (ISO)**	**2.5 - <10 %**
CAS: 13463-67-7	**Titanium dioxide**	**2.5 - <10 %**
CAS: 71-36-3	**butan-1-ol**	**2.5 - <10 %**
CAS: 108-38-3	**m-xylene**	**1 - <2.5 %**
CAS: 80-39-7	**N-ethyltoluene-4-sulphonamide**	**1 - <2.5 %**
CAS: 100-41-4	**Ethylbenzene**	**<1 %**

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 necessary 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:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

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, as 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/effects, acute and delayed:

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

4.3 Indication of immediate medical attention and special treatment needed, if necessary:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

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SECTION 5: FIRE-FIGHTING MEASURES (continued)

5.1 Suitable (and unsuitable) extinguishing media:

Suitable extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO_2).

Unsuitable extinguishing media:

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

5.2 Specific hazards arising from the chemical:

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 Special protective equipment and precautions for fire-fighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

Additional provisions:

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Only properly trained personnel should be involved in firefighting. Evacuate nonessential personnel from the fire area. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation. 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:

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 inertization agent. 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.

6.2 Environmental precautions:

The characteristic of Ignitability per RCRA could apply to the unused product if it becomes a waste material. The EPA hazardous waste number D001 could apply. It is the responsibility of the waste generator to evaluate whether his wastes are hazardous by characteristics or listing.

6.3 Methods and materials 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 standards 29 CFR 1910 Occupational Safety and Health Standards. 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

Because the product is a flammable liquid, storage should meet the requirement of 29 CFR 1910.106, Flammable and Combustible Liquids Code. Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,…) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems and with the minimum requirements for protecting the security and health of workers. 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)

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 41 ºF

Maximum Temp.: 86 ºF

Maximum time: 18 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:

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000):

Identification	Occupational exposure limits		
2-methylpropan-1-ol CAS: 78-83-1	8-hour TWA PEL	100 ppm	300 mg/m³
	Ceiling Values - TWA PEL		
Xylene CAS: 1330-20-7	8-hour TWA PEL	100 ppm	435 mg/m³
	Ceiling Values - TWA PEL		
Titanium dioxide CAS: 13463-67-7	8-hour TWA PEL		15 mg/m³
	Ceiling Values - TWA PEL		
butan-1-ol CAS: 71-36-3	8-hour TWA PEL	100 ppm	300 mg/m³
	Ceiling Values - TWA PEL		
m-xylene CAS: 108-38-3	8-hour TWA PEL	100 ppm	435 mg/m³
	Ceiling Values - TWA PEL		
Ethylbenzene CAS: 100-41-4	8-hour TWA PEL	100 ppm	435 mg/m³
	Ceiling Values - TWA PEL		

US. ACGIH Threshold Limit Values:

Identification	Occupational exposure limits		
2-methylpropan-1-ol CAS: 78-83-1	TLV-TWA	50 ppm	
	TLV-STEL		
Xylene CAS: 1330-20-7	TLV-TWA	100 ppm	
	TLV-STEL	150 ppm	
Titanium dioxide CAS: 13463-67-7	TLV-TWA		10 mg/m³
	TLV-STEL		
butan-1-ol CAS: 71-36-3	TLV-TWA	15 ppm	
	TLV-STEL		
m-xylene CAS: 108-38-3	TLV-TWA	100 ppm	
	TLV-STEL	150 ppm	
Ethylbenzene CAS: 100-41-4	TLV-TWA	20 ppm	
	TLV-STEL		

CALIFORNIA- TABLE AC-1 PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS:

Identification	Occupational exposure limits		
Dicopper oxide CAS: 1317-39-1	PEL		1 mg/m³
	STEL		
2-methylpropan-1-ol CAS: 78-83-1	PEL	50 ppm	150 mg/m³
	STEL		
Xylene CAS: 1330-20-7	PEL	100 ppm	435 mg/m³
	STEL	150 ppm	655 mg/m³
butan-1-ol CAS: 71-36-3	PEL	50 ppm	150 mg/m³
	STEL	50 ppm	150 mg/m³

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

CALIFORNIA- TABLE AC-1 PERMISSIBLE EXPOSURE LIMITS FOR CHEMICAL CONTAMINANTS:

Identification	Occupational exposure limits		
m-xylene	PEL	100 ppm	435 mg/m³
CAS: 108-38-3	STEL	150 ppm	655 mg/m³
Ethylbenzene	PEL	5 ppm	22 mg/m³
CAS: 100-41-4	STEL	30 ppm	130 mg/m³

8.2 Appropriate engineering controls:

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

As a preventative measure it is recommended to use basic Personal Protection Equipment. For more information on Personal Protection 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, the information on clothing performance must be combined with professional judgment, and a clear understanding of the clothing application, to provide the best protection to the worker. All chemical protective clothing use must be based on a hazard assessment to determine the risks for exposure to chemicals and other hazards. Conduct hazard assessments in accordance with 29 CFR 1910.132.

B.- Respiratory protection

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles	Replace when an increase in resistence to breathing is observed and/or a smell or taste of the contaminant is detected. Use respirator in accordance with manufacturer´s use limitations and OSHA standard 1910.134 (29CFR).

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	NON-disposable chemical protective gloves	The Breakthrough Time indicated by the manufacturer must exceed the period during which the product is being used. Do not use protective creams after the product has come into contact with skin. Use gloves in accordance with manufacturer´s use limitations and OSHA standard 1910.138 (29CFR)

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

Pictogram	PPE	Remarks
 Mandatory face protection	Face shield	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing. Use this PPE in accordance with manufacturer´s use limitations and OSHA standard 1910.133 (29CFR)

E.- Bodily protection

Pictogram	PPE	Remarks
 Mandatory complete body protection	Disposable clothing for protection against chemical risks, with antistatic and fireproof properties	For professional use only. Clean periodically according to the manufacturer´s instructions.
 Mandatory foot protection	Safety footwear for protection against chemical risk, with antistatic and heat resistant properties	Replace boots at any sign of deterioration.

F.- Additional emergency measures

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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 68 ºF:	Liquid
Appearance:	Characteristic
Color:	Blue
Odor:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	116 - 372 ºF
Vapour pressure at 68 ºF:	1128 Pa
Vapour pressure at 122 ºF:	6511.87 Pa (6.51 kPa)
Evaporation rate at 68 ºF:	Non-applicable *

Product description:

Density at 68 ºF:	1520.6 kg/m³
Relative density at 68 ºF:	1.521
Dynamic viscosity at 68 ºF:	Non-applicable *
Kinematic viscosity at 68 ºF:	Non-applicable *
Kinematic viscosity at 104 ºF:	Non-applicable *
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 68 ºF:	Non-applicable *
Partition coefficient n-octanol/water 68 ºF:	Non-applicable *
Solubility in water at 68 ºF:	
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

Flash Point:	80 ºF
Heat of combustion:	Non-applicable *
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	460 ºF
Lower flammability limit:	Not available
Upper flammability limit:	Not available

*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)

Explosive:

Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

9.2 Other information:

Surface tension at 68 ºF:	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	Risk of combustion	Avoid direct impact	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 (CO_2), carbon monoxide and other organic compounds.

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 recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. 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 : Exposure in high concentration can cause a breakdown in the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. 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: Produces eye damage after contact.

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

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met. For more information see section 3.
  IARC: Xylene (3); Ziram (ISO) (3); m-xylene (3); Ethylbenzene (2B); Titanium dioxide (2B)
- 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, as it does not 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: Based on available data, the classification criteria are not met. For more information see section 3.

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

Based on available data, the classification criteria are not met. 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. 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. For more information see section 3.

Other information:

CAS 13463-67-7 Titanium dioxide: The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Xylene	LD50 oral	2100 mg/kg	Rat
CAS: 1330-20-7	LD50 dermal	1100 mg/kg	Rat
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
2-methylpropan-1-ol	LD50 oral	3350 mg/kg	Rat
CAS: 78-83-1	LD50 dermal	2460 mg/kg	Rabbit
	LC50 inhalation	24.6 mg/L (4 h)	Rat
butan-1-ol	LD50 oral	500 mg/kg (ATEi)	
CAS: 71-36-3	LD50 dermal	3400 mg/kg	Rabbit
	LC50 inhalation	24.66 mg/L (4 h)	Rat
m-xylene	LD50 oral	1590 mg/kg	Mouse
CAS: 108-38-3	LD50 dermal	1100 mg/kg (ATEi)	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Titanium dioxide	LD50 oral	10000 mg/kg	Rat
CAS: 13463-67-7	LD50 dermal	10000 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	
Dicopper oxide	LD50 oral	1340 mg/kg	Rat
CAS: 1317-39-1	LD50 dermal	Non-applicable	
	LC50 inhalation	11 mg/L (4 h) (ATEi)	
Ziram (ISO)	LD50 oral	500 mg/kg	Rat
CAS: 137-30-4	LD50 dermal	Non-applicable	
	LC50 inhalation	0.5 mg/L (4 h) (ATEi)	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
Ethylbenzene	LD50 oral	3500 mg/kg	Rat
CAS: 100-41-4	LD50 dermal	15354 mg/kg	Rabbit
	LC50 inhalation	17.2 mg/L (4 h)	Rat

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Ecotoxicity (aquatic and terrestrial, where available):

Identification	Acute toxicity		Species	Genus
Rosin	LC50	150 mg/L (96 h)	Brachydanio rerio	Fish
CAS: 8050-09-7	EC50	238 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	185 mg/L (72 h)	Selenastrum capricornutum	Algae
Dicopper oxide	LC50	0.8 mg/L (96 h)	Cyprinus carpio	Fish
CAS: 1317-39-1	EC50	0.117 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
2-methylpropan-1-ol	LC50	2030 mg/L (96 h)	Carassius auratus	Fish
CAS: 78-83-1	EC50	1439 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1250 mg/L (48 h)	Scenedesmus subspicatus	Algae
Ziram (ISO)	LC50	0.01 mg/L (96 h)	Lepomis macrochirus	Fish
CAS: 137-30-4	EC50	0.048 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
butan-1-ol	LC50	1740 mg/L (96 h)	Pimephales promelas	Fish
CAS: 71-36-3	EC50	1983 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	500 mg/L (96 h)	Scenedesmus subspicatus	Algae
m-xylene	LC50	16 mg/L (96 h)	Carassius auratus	Fish
CAS: 108-38-3	EC50	9.56 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		
Ethylbenzene	LC50	42.3 mg/L (96 h)	Pimephales promelas	Fish
CAS: 100-41-4	EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	63 mg/L (3 h)	Chlorella vulgaris	Algae

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-methylpropan-1-ol	BOD5	0.4 g O2/g	Concentration	100 mg/L
CAS: 78-83-1	COD	2.41 g O2/g	Period	14 days
	BOD5/COD	0.17	% Biodegradable	90 %
Xylene	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 1330-20-7	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	88 %
butan-1-ol	BOD5	1.71 g O2/g	Concentration	Non-applicable
CAS: 71-36-3	COD	2.46 g O2/g	Period	19 days
	BOD5/COD	0.7	% Biodegradable	98 %
Ethylbenzene	BOD5	Non-applicable	Concentration	100 mg/L
CAS: 100-41-4	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
2-methylpropan-1-ol	BCF	3
CAS: 78-83-1	Pow Log	0.76
	Potential	Low

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Bioaccumulation potential	
Xylene	BCF	9
CAS: 1330-20-7	Pow Log	2.77
	Potential	Low
Ziram (ISO)	BCF	470
CAS: 137-30-4	Pow Log	1.23
	Potential	High
butan-1-ol	BCF	1
CAS: 71-36-3	Pow Log	0.88
	Potential	Low
m-xylene	BCF	15
CAS: 108-38-3	Pow Log	3.2
	Potential	Low
Ethylbenzene	BCF	1
CAS: 100-41-4	Pow Log	3.15
	Potential	Low

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-methylpropan-1-ol	Koc	Non-applicable	Henry	Non-applicable
CAS: 78-83-1	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	2.378E-2 N/m (77 ºF)	Moist soil	Non-applicable
Xylene	Koc	202	Henry	524.86 Pa·m³/mol
CAS: 1330-20-7	Conclusion	Moderate	Dry soil	Yes
	Surface tension	Non-applicable	Moist soil	Yes
Ziram (ISO)	Koc	Non-applicable	Henry	6.282E-5 Pa·m³/mol
CAS: 137-30-4	Conclusion	Non-applicable	Dry soil	No
	Surface tension	Non-applicable	Moist soil	No
butan-1-ol	Koc	2.44	Henry	5.39E-2 Pa·m³/mol
CAS: 71-36-3	Conclusion	Very High	Dry soil	Yes
	Surface tension	2.567E-2 N/m (77 ºF)	Moist soil	Yes
m-xylene	Koc	182	Henry	790.34 Pa·m³/mol
CAS: 108-38-3	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.826E-2 N/m (77 ºF)	Moist soil	Yes
Ethylbenzene	Koc	520	Henry	798.44 Pa·m³/mol
CAS: 100-41-4	Conclusion	Moderate	Dry soil	Yes
	Surface tension	2.859E-2 N/m (77 ºF)	Moist soil	Yes

12.5 Results of PBT and vPvB assessment:

Non-applicable

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Disposal methods:

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations. 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 epigraph 6.2.

Regulations related to waste management:

Legislation related to waste management:

40 CFR Part 261- IDENTIFICATION AND LISTING OF HAZARDOUS WASTE

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SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to 49 CFR on the Transport of Dangerous Goods:

14.1	**UN number:**	UN1263
14.2	**UN proper shipping name:**	PAINT
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group, if applicable:**	III
14.5	**Marine pollutant:**	Yes
14.6	**Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**	
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
	Under 49 CFR 171.4, Except when transporting aboard a vessel, the requirements of this subchapter specific to marine pollutants do not apply to non-bulk packagings transported by motor vehicles, rail cars, and aircraft	
14.7	**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 39-18:

14.1	**UN number:**	UN1263
14.2	**UN proper shipping name:**	PAINT
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group, if applicable:**	III
14.5	**Marine pollutant:**	Yes
14.6	**Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**	
	Special regulations:	223, 955, 163, 367
	EmS Codes:	F-E, S-E
	Physico-Chemical properties:	see section 9
	Limited quantities:	5 L
	Segregation group:	Non-applicable
14.7	**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2021:

14.1	**UN number:**	UN1263
14.2	**UN proper shipping name:**	PAINT
14.3	**Transport hazard class(es):**	3
	Labels:	3
14.4	**Packing group, if applicable:**	III
14.5	**Marine pollutant:**	Yes
14.6	**Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises**	
	Physico-Chemical properties:	see section 9
14.7	**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):**	Non-applicable

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations specific for the product in question:

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SECTION 15: REGULATORY INFORMATION (continued)

SARA Title III - Toxic Chemical Release Inventory Reporting (Section 313): Xylene ; butan-1-ol ; m-xylene ; Ethylbenzene
California Proposition 65 (the Safe Drinking Water and Toxic Enforcement Act of 1986): Titanium dioxide ; Ethylbenzene
The Toxic Substances Control Act (TSCA) : Rosin ; Dicopper oxide ; 2-methylpropan-1-ol ; Xylene ; Ziram (ISO) ; Titanium dioxide ; butan-1-ol ; m-xylene ; N-ethyltoluene-4-sulphonamide ; Ethylbenzene
Massachusetts RTK - Substance List: Dicopper oxide ; 2-methylpropan-1-ol ; Xylene ; Ziram (ISO) ; Titanium dioxide ; butan-1-ol ; m-xylene ; Ethylbenzene
New Jersey Worker and Community Right-to-Know Act: Dicopper oxide ; 2-methylpropan-1-ol ; Xylene ; Ziram (ISO) ; Titanium dioxide ; butan-1-ol ; m-xylene ; Ethylbenzene
New York RTK - Substance list: Dicopper oxide ; 2-methylpropan-1-ol ; Xylene ; Titanium dioxide ; butan-1-ol ; m-xylene ; Ethylbenzene
Pennsylvania Worker and Community Right-to-Know Law: Dicopper oxide ; 2-methylpropan-1-ol ; Xylene ; Titanium dioxide ; butan-1-ol ; m-xylene ; Ethylbenzene
CANADA-Domestic Substances List (DSL): Rosin ; Dicopper oxide ; 2-methylpropan-1-ol ; Xylene ; Ziram (ISO) ; Titanium dioxide ; butan-1-ol ; m-xylene ; N-ethyltoluene-4-sulphonamide ; Ethylbenzene
CANADA-Non-Domestic Substances List (NDSL): Non-applicable
NTP (National Toxicology Program): Non-applicable
Minnesota - Hazardous substances ERTK: Rosin ; 2-methylpropan-1-ol ; Xylene ; Titanium dioxide ; butan-1-ol ; m-xylene ; Ethylbenzene
Rhode Island - Hazardous substances RTK: 2-methylpropan-1-ol ; Xylene ; Titanium dioxide ; butan-1-ol ; m-xylene ; Ethylbenzene
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1096): Non-applicable
Hazardous Air Pollutants (Clean Air Act): Xylene ; m-xylene ; Ethylbenzene
Hazardous substances release notification under CERCLA sections 102-103 (40 CFR Part 302): 2-methylpropan-1-ol (5000 pounds) ; Xylene (100 pounds) ; Ziram (ISO) (10 pounds) ; butan-1-ol (5000 pounds) ; m-xylene (1000 pounds) ; Ethylbenzene (1000 pounds)

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

Take into consideration other applicable federal, state, and local laws and local regulations.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:
This safety data sheet has been designed in accordance with Appendix d to §1910.1200 - Safety data sheets

Texts of the legislative phrases mentioned in section 2:
H332: Harmful if inhaled.
H319: Causes serious eye irritation.
H226: Flammable liquid and vapour.
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

29 CFR 1910.1200:
Acute Tox. 4: H302 - Harmful if swallowed.
Acute Tox. 4: H302+H332 - Harmful if swallowed or if inhaled.
Acute Tox. 4: H312+H332 - Harmful in contact with skin or if inhaled.
Acute Tox. 4: H332 - Harmful if inhaled.
Eye Irrit. 2A: H319 - Causes serious eye irritation.
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
Skin Irrit. 2: H315 - Causes skin irritation.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
STOT SE 3: H335 - May cause respiratory irritation.
STOT SE 3: H336 - May cause drowsiness or dizziness.

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SECTION 16: OTHER INFORMATION (continued)

Advice related to training:

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

Principal bibliographical sources:

Occupational Safety & Health Administration (OSHA).

Abbreviations and acronyms:

IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
CL50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

END OF SAFETY DATA SHEET