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

1.1. Product identifier

SEAJET 034 EMPEROR
BLACK - NAVY BLUE

Product code: 634VR - Version 5 - Revision Date: 22-07-2021

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

PT21 - Antifouling paint.

1.3. Details of the supplier of the safety data sheet

Chugoku Paints B.V., Sluisweg 12, 4794 SW Heijningen, Po Box 73, 4793 ZH Fijnaart, The Netherlands, Tel.+31-167-526100, E-mail: msdsregistration@cmpeurope.eu

1.4. Emergency telephone number

National Poisons Information Centre (NPIC) Tel. 01 809 2566 - 24/7

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Flam. Liq. 3 H226	Flammable liquid and vapour.
Acute Tox. 4 H332	Harmful if inhaled.
Skin Irrit. 2 H315	Causes skin irritation.
Eye Dam. 1 H318	Causes serious eye damage.
Skin Sens. 1 H317	May cause an allergic skin reaction.
Repr.1 H360	May damage fertility or the unborn child.
STOT SE 3 H335	May cause respiratory irritation.
STOT RE 2 H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Acute 1 H400	Very toxic to aquatic life.
Aquatic Chronic 1 H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements


GHS02


GHS05


GHS07

Hazard pictogram(s):


GHS08


GHS09

Signal word: Danger

Labelling according to Regulation (EC) No 1272/2008 [CLP]:

Hazard statement(s):

H226	Flammable liquid and vapour.
H332	Harmful if inhaled.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H360	May damage fertility or the unborn child.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.

Supplemental hazard information (EU):

EUH032 Contact with acids liberates very toxic gas.

Precautionary statement(s)

Prevention:

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

P260: Do not breathe vapours/spray.

P273: Avoid release to the environment.

P280: Wear protective gloves, protective clothing, eye protection, face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor.

P370+P378: In case of fire: Use alcohol resistant foam to extinguish.

P391: Collect spillage.

Storage & Disposal: -

Contains (EC 1272/2008 18.3(b)):

Cuprous Thiocyanate.

Reaction mass of Ethylbenzene and Xylene.

Rosin.

Pyrithione zinc.

Extended details regarding health and environment, see Section 11 & 12.

2.3. Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Restricted to professional users.

Children shall be kept away until treated surfaces are dry.

Application, maintenance and repair activities shall be conducted within a contained area, on impermeable hard standing with bunding or on soil covered with an impermeable material to prevent losses and minimise emissions to the environment, and that any losses or waste shall be collected for reuse or disposal.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substances presenting a health or environmental hazard within the meaning of Regulation (EC) No. 1272/2008, assigned a Community workplace exposure limit, classified as PBT/vPvB or included in the Candidate List. (*) For full text of H-statements, see SECTION 16.

Substance name	Identification number	% [weight]	Hazard statement Code(s) (*) / Hazard Class and Category Codes	
Cuprous Thiocyanate.	EG-nr: 214-183-1 CAS-nr: 1111-67-7 Index: 029-015-00-0 Reach#: -	25-30 %	H400 - Aquatic Acute 1 H410 - Aquatic Chronic 1 EUH032 SCL / M-factor / ATE: - M(ac)=10 M(chr)=10	- - -
Reaction Mass Of Ethylbenzene And Xylene.	EG-nr: 905-588-0 CAS-nr: - Index: - Reach#: 01-2119488216-32	20-25 %	H226 - Flam. Liq. 3 H304 - Asp. Tox. 1 H312 - Acute Tox. 4 H315 - Skin Irrit. 2 SCL / M-factor / ATE: H312-ATE 1100mg/kg bw, H332-ATE 29mg/l	H319 - Eye Irrit. 2 H332 - Acute Tox. 4 H335 - STOT SE 3 H373 - STOT RE 2
Rosin.	EG-nr: 232-475-7 CAS-nr: 8050-09-7 Index: 650-015-00-7 Reach#: 01-2119480418-32	10-15 %	H317 - Skin Sens. 1 - -	- - -
Zinc Oxide.	EG-nr: 215-222-5 CAS-nr: 1314-13-2 Index: 030-013-00-7 Reach#: 01-2119463881-32	1-5 %	H400 - Aquatic Acute 1 H410 - Aquatic Chronic 1 -	- - -
Hydrocarbons, C10, Aromatics, <1% Naphthalene.	EG-nr: 918-811-1 CAS-nr: - Index: - Reach#: 01-2119463583-34	1-5 %	H304 - Asp. Tox. 1 H336 - STOT SE 3 H411 - Aquatic Chronic 2 EUH066	- - - -
Pyrithione Zinc.	EG-nr: 236-671-3 CAS-nr: 13463-41-7 Index: - Reach#: 01-2119511196-46	3-5 %	H360Df - Repr.1 H330 - Acute Tox. 2 H301 - Acute Tox. 3 H372 - STOT RE 1 SCL / M-factor / ATE: H330-ATE 0.14 mg/L (Dust/Mist), H301-ATE 221mg/kg bw - M(ac)=1000 M(chr)=10	H318 - Eye Dam. 1 H400 - Aquatic Acute 1 H410 - Aquatic Chronic 1 -
1-Methoxy-2-Propanol.	EG-nr: 203-539-1 CAS-nr: 107-98-2 Index: 603-064-00-3 Reach#: 01-2119457435-35	1-5 %	H226 - Flam. Liq. 3 H336 - STOT SE 3 -	- - -
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	EG-nr: 809-930-9 CAS-nr: 1330-78-5 Index: - Reach#: 01-2119531335-46	1-5 %	H361fd(*) H400 - Aquatic Acute 1 H410 - Aquatic Chronic 1	- - -

SECTION 4: First aid measures

4.1. Description of first aid measures

Pay attention to your own safety! 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.

following inhalation:

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

following skin contact:

Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

following eye contact:

Remove contact lenses, if present and easy to do. Irrigate copiously with clean, fresh water, holding the eyelids apart for at least 15 minutes and seek immediate medical advice.

following ingestion:

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Potential acute symptoms and effects

following inhalation:

Exposure to vapours may cause a health hazard. Serious effects may be delayed following exposure.
Harmful if inhaled.
May cause respiratory irritation.

following skin contact:

Causes skin irritation.

following eye contact:

Causes serious eye damage.

following ingestion:

No known significant effects or critical hazards.

Potential delayed symptoms and effects

following inhalation:

No specific data.

following skin contact:

May cause an allergic skin reaction.

following eye contact:

Adverse symptoms may include the following: irritation, watering, redness

following ingestion:

No specific data.

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

Notes to physician

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments

No specific treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol resistant foam, CO2, powders, water spray/mist.

Extinguishing media which must not be used for safety reasons:

Water jet. Zincdust containing products should not be extinguished with water.

5.2. Special hazards arising from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. See Section 10.

5.3. Advice for firefighters

There is no one clothing material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Fire fighter's clothing conforming to European standard EN469 provides a basic level of protection for chemical incidents. Appropriate breathing apparatus may be required (Self-Contained Breathing Apparatus (SCBA)). Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Comply with company's emergency procedures. Exclude sources of ignition and ventilate the area. Use safety goggles or safety glasses, as well as any other appropriate personal protective equipment, at all times. Avoid breathing vapours. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material.Refer to protective measures listed in Sections 7 and 8.

For emergency responders: See Section 8 for information on appropriate personal protective equipment. See also the information: "For non-emergency personnel".

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Place in a suitable container. Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. No sparking tools should be used. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear anti-static footwear and clothing and floors should be of the conducting type. Avoid skin and eye contact. Avoid the inhalation of particulates and spray mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Smoking, eating and drinking should be prohibited in application area. For personal protection see Section 8. Never use pressure to empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses. Isolate from sources of heat, sparks and open flame. 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.

Information regarding fire and explosion hazard

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Additional information on storage conditions

Observe label precautions. Store between 0ºC and 40ºC in a dry, well ventilated place away from sources of heat and direct sunlight. Keep container tightly closed. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Application: Airless spray, Brush, Roller (See also Technical Data Sheet.) Spray: professional use only.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Limits for occupational exposure and / or biological limit values	IE	EU
	LIMIT VALUES TWA8h - STEL15 ppm-mg/m³	LIMIT VALUES TWA8h - STEL15 ppm-mg/m³
Cuprous Thiocyanate.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Notes -	Notation -
Reaction Mass Of Ethylbenzene And Xylene.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Notes -	Notation -
Rosin.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Notes -	Notation -
Zinc Oxide.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Notes -	Notation -
Hydrocarbons, C10, Aromatics, <1% Naphthalene.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Notes -	Notation -
Pyrithione Zinc.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Notes -	Notation -
1-Methoxy-2-Propanol.	TWA8h 100 ppm / 375 mg/m³	TWA8h 100 ppm / 375 mg/m³
	STEL 150 ppm / 568 mg/m³	STEL15 150 ppm / 568 mg/m³
	Notes IOELV	Notation Skin
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	TWA8h - ppm / - mg/m³	TWA8h - ppm / - mg/m³
	STEL - ppm / - mg/m³	STEL15 - ppm / - mg/m³
	Notes -	Notation -

Ireland - TWA=Time Weighted Average (8hr) - STEL=Short-term exposure limit (15-minute reference period) - Health and Safety Authority - Code of Practice.

Europe - TWA = Time Weight Average (8hr) - Measured or calculated in relation to a reference period of 8 hours time-weighted average (TWA) - STEL = Short-term exposure limit - A limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified - SCOEL

Notes / Notations:

BOELV: Binding Occupational Exposure Limit Values

Carc.1A: substances known to have carcinogenic potential for humans; classification is largely based on human evidence to which the EU Classification, Labelling and Packaging Regulation (EC) No.1272/2008 applies and as defined in the Safety, Health and Welfare at Work (Carcinogens) (Amendment) Regulations 2015.

Carc.1B: substances presumed to have carcinogenic potential for humans; classification is largely based on animal evidence to which Classification, Labelling and Packaging Regulation (EC) No. 1272/2008 apply and as defined in the Safety, Health and Welfare at Work (Carcinogens)((Amendment) Regulations 2015.

Inh.: Inhalable fraction.

IOELV: Indicative Occupational Exposure Limit Values.

Muta.1A: substances which are known to induce heritable mutations in the germ cells of humans; classification is based on positive evidence from human studies to which the Regulation (EC) No. 1272/2008 on Classification, Labelling and

Packaging of substances and mixtures apply and as defined in the Safety, Health and Welfare at Work (Carcinogens) (Amendment) Regulations 2015.
Muta.1B: substances which should be regarded as if they induce heritable mutations in the germ cells of humans; classification is based on evidence from mutagenicity tests in mammals or humans, to which the Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of substances and mixtures apply and as defined in the Safety, Health and Welfare at Work (Carcinogens) (Amendment) Regulations 2015.
Inhalable Fraction and Vapour (IFV): the Inhalable Fraction and Vapour note is used when a material exerts sufficient vapour pressure such that it may be present in both particle and vapour phases.
Repr.1A: substances which are known human reproductive toxicants, largely based on evidence from human studies to which the Regulation (EC) No.1272/2008 on Classification, Labelling and Packaging of substances and mixtures apply.
Repr.1B: substances which are presumed human reproductive toxicants, largely based on data from animal studies, to which the Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of substances and mixtures apply.
Resp.: Respirable fraction.
Respirable Fraction (R): particles of inhalable aerosols that are inhaled and are not captured in the upper airways (nasopharyngeal and tracheobronchial regions) but penetrate to the pulmonary region containing the respiratory bronchioles, alveolar ducts and alveolar sacs are considered to comprise of the Respirable Fraction of the aerosol.
Sens.: in the workplace respiratory or dermal exposures to sensitising agents may occur.
Sk: substances which have the capacity to penetrate intact skin when they come in contact with it, and be absorbed into the body.
Skin: A skin notation assigned to the occupational exposure limit value indicates the possibility of significant uptake through the skin.

DNEL - Not available.

PNEC - Not available.

8.2. 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 vapour below the OEL, suitable respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

Personal Protection

Respiratory protection

If workers could be exposed to concentrations above the exposure limit they should use a respirator to EN 140, fitted with a filter suitable for both particulates and vapours to EN14387, with an assigned protection factor of at least 10 (e.g. A2P3).

Dry sanding, flame cutting and/or welding of the dry paint film may give rise to dust and/or hazardous fumes. Wet sanding should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. At repeated or prolonged contact; use gloves tested according to EN 374. Viton-gloves offer good protection for intense contact with most solvents, e.g. complete immersion in solvent.

Nitrile gloves offer good protection during spray application. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. The breakthrough time must be greater than the end use time of the product. 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, they should however not be applied once exposure has occurred.

Gloves for repeated or prolonged exposure (Permeation breakthrough times > 480 min) - High Protection:

Material:	Minimum Thickness:	Chemical resistance:
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High

Gloves for repeated or prolonged exposure (Permeation breakthrough times 240 - 480 min) - High Protection:		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High

Gloves for repeated or prolonged exposure (Permeation breakthrough times 120-240 min) - Medium Protection:		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High

Gloves for repeated or prolonged exposure (Permeation breakthrough times 60 - 120 min) - Medium Protection:		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High

Gloves for short term exposure / splash protection (Permeation breakthrough times 30 - 60 min):		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High
Nitrile Gloves	0,31mm	High

Gloves for short term exposure / splash protection (Permeation breakthrough times 10 - 30 min):		
Material:	**Minimum Thickness:**	**Chemical resistance:**
Polyethylene (PE) Gloves	0,062mm	High
PVA Gloves	0,2-0,3mm	High
Butyl Viton Gloves	0,70mm	High
Neoprene Gloves	<0,4mm	High
Nitrile Gloves	0,175mm	High

Non suitable Gloves - non exhaustive list (Permeation breakthrough times < 10 min):	
Material:	**Thickness (or less):**
Natural Rubber Gloves	0,75mm
Nitrile Gloves	-
Neoprene Gloves	0,75mm
Butyl Gloves	0,50mm

Due to many conditions (e.g. temperature, abrasion) the practical usage of a chemical protective glove in practice may be much shorter than the permeation time determined through testing. USE PE gloves as under gloves for difficult situations like for instance: high exposure, unknown composition or unknown properties of the chemicals.

Eye/face protection
Use safety eyewear tested according to EN 166 designed to protect against splash of liquids.

Skin protection
Personnel should wear anti-static clothing made of natural fibre or of high temperature resistant synthetic fibre.

Environmental exposure controls
Do not allow to enter drains or water courses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

(a) Physical state

Liquid

(b) Colour

Diverse.

(c) Odour

Typical aromatic odour.

(d) Melting point/freezing point

Not applicable due to nature of the product.

(e) Boiling point or initial boiling point and boiling range

Not applicable due to nature of the product. Lowest Boiling Point: 1-methoxy-2-propanol. - 117ºC

(f) Flammability

Vapours are ignitable. See Flash point (h).

(g) Lower and upper explosion limit

The product itself is not explosive, but the formation of an explosive mixture of vapour or dust with air is possible.

Cuprous Thiocyanate.	Not applicable.
Reaction Mass Of Ethylbenzene And Xylene.	1.0-7.0%
Rosin.	Not applicable.
Zinc Oxide.	Not applicable.
Hydrocarbons, C10, Aromatics, <1% Naphthalene.	Not available.
Pyrithione Zinc.	Not applicable.
1-Methoxy-2-Propanol.	1.9-13.1%
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	Not available.

(h) Flash point

24°C - Method: ASTM D3278-96 (Re-appr.2004)

(i) Auto-ignition temperature

Not applicable due to nature of the product. Lowest Boiling Point: 1-methoxy-2-propanol. - 117ºC

(j) Decomposition temperature

Not applicable due to nature of the product.

(k) pH

Not applicable due to nature of the product. Mixture is non-soluble (in water).

(l) Kinematic viscosity

245 mm²/s @40ºC - Method: ISO3219

Non-Newtonian liquid - thixotropic behaviour.

(m) Solubility

Not Soluble (in water).

(n) Partition coefficient n-octanol/water (log value)

Not applicable due to nature of the product.

(o) Vapour pressure

Cuprous Thiocyanate.	Not available.
Reaction Mass Of Ethylbenzene And Xylene.	8.21 mbar
Rosin.	0,6kPa
Zinc Oxide.	Not applicable.

(o) Vapour pressure

Hydrocarbons, C10, Aromatics, <1% Naphthalene.	1 Kpa
Pyrithione Zinc.	Not available.
1-Methoxy-2-Propanol.	11.6 mbar
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	0.00195 Pa

(p) Density and/or relative density

Relative density 1,36-1,40 @ 20ºC - Method: ASTM D1475-98

(q) Relative vapour density

1-2 @ 20ºC - Method: Calculated.

(r) Particle characteristics

Not applicable due to nature of the product.

9.2. Other information

Information with regard to physical hazard classes

No relevant information.

Other safety characteristics

No relevant information.

SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

In combination with oxidizing agents, strongly alkaline and strongly acid materials, exothermic reactions and/or explosive reactions may occur or toxic vapours may arise.

10.4. Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials

Keep away from oxidising agents, strongly alkaline and strongly acid materials.

10.6. Hazardous decomposition products

Carbon monoxide and dioxide, smoke, oxides of nitrogen etc.

SECTION 11: Toxicological information

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

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Exposure to component solvents vapours concentration 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 kidney, 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. The liquid splashed in the eyes may cause irritation and reversible damage. Ingestion may cause nausea, diarrhoea 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.

Substance name

Cuprous Thiocyanate. - LD50 Oral - >5000mg/kg, Rat - LD50 Dermal - >2000mg/kg, Rat - LC50 Inhalation - Not available.

Reaction Mass Of Ethylbenzene And Xylene. - LD50 Oral - >2000 mg/kg, Rat - LD50 Dermal - >2000 mg/kg, Rat - LC50 Inhalation - 29 mg/lRat,4h

Rosin. - LD50 Oral - Not available. - LD50 Dermal - Not available. - LC50 Inhalation - Not available.

Zinc Oxide. - LD50 Oral - >5000 mg/kg, Rat - LD50 Dermal - Not available. - LC50 Inhalation - >5700 mg/m3Rat,4h

Hydrocarbons, C10, Aromatics, <1% Naphthalene. - LD50 Oral - Not available. - LD50 Dermal - Not available. - LC50 Inhalation - Not available.

Pyrithione Zinc. - LD50 Oral - 269 mg/kg, Rat - LD50 Dermal - >2000 mg/kg, Rat - LC50 Inhalation - 1,03 mg/lRat,4h

1-Methoxy-2-Propanol. - LD50 Oral - 4016 mg/kg, Rat - LD50 Dermal - >13300 mg/kg, Rabbit - LC50 Inhalation - 54,6 mg/lRat,4h

Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate. - LD50 Oral - >2000mg/kg, Rat - LD50 Dermal - >2000mg/kg, Rat - LC50 Inhalation - >11,1mg/lRat,1h

Conclusion/Summary on mixture

Acute toxicity:

ATEmix (oral) : No specific data.
ATEmix (Dermal) : No specific data.
ATEmix (Inhalation) : No specific data.

Skin corrosion/irritation:

Conclusion/Summary on mixture: Causes skin irritation.

Method: Additivity approach, No testdata available.

Serious eye damage/irritation:

Conclusion/Summary on mixture: Causes serious eye damage.

Method: Additivity approach, no testdata available.

Respiratory or skin sensitisation:

Conclusion/Summary on mixture

Respiratory sensitization Based on available data, the classification criteria are not met. Justification: Concentration limit, No testdata available.

Skin sensitization May cause an allergic skin reaction. Method: Concentration Limit, no testdata available.

Germ cell mutagenicity:

Conclusion/Summary on mixture: Based on available data, the classification criteria are not met. Justification: Concentration limit, No testdata available.

Carcinogenicity:

Conclusion/Summary on mixture: Based on available data, the classification criteria are not met. Justification: Concentration limit, No testdata available.

Reproductive toxicity:

Conclusion/Summary on mixture: May damage fertility or the unborn child. Method: Concentration Limit, no testdata available.

STOT - single exposure:

Conclusion/Summary on mixture: Based on available data, the classification criteria are not met. Justification: Concentration limit, No testdata available.

STOT - repeated exposure:

Conclusion/Summary on mixture: May cause damage to organs through prolonged or repeated exposure. Method: Concentration Limit, no testdata available.

Aspiration hazard:

Conclusion/Summary on mixture: Based on available data, the classification criteria are not met.
Justification: Additivity approach / Kinematic viscosity: 245 mm²/s @40ºC - Measured

Information on likely routes of exposure

Inhalation: No known significant effects or critical hazards.

Ingestion: No specific data.

Skin exposure: Causes skin irritation. May cause an allergic skin reaction.
Eye exposure: Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: Adverse symptoms may include the following: Cough
Ingestion: No specific data.
Skin exposure: Adverse symptoms may include the following: irritation, redness.
Eye exposure: Adverse symptoms may include the following: irritation, watering, redness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure:

Potential immediate effects:	No specific data.
Potential delayed effects:	No specific data.

Long term exposure:

Potential immediate effects:	No specific data.
Potential delayed effects:	No specific data.

Potential chronic health effects:

Conclusion/Summary on mixture

General:	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects:	No known significant effects or critical hazards.
Other information:	No relevant information.

Contains Rosin. May produce an allergic reaction.

11.2 Information on other hazards

Endocrine disrupting properties
No relevant information.
Other information
No relevant information.

SECTION 12: Ecological information

There are no data available on the mixture itself. Do not allow to enter drains or water courses.
The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and classified for eco-toxicological hazards accordingly.

12.1. Toxicity

Substance name - Species - Exposure - Results
Cuprous Thiocyanate. Acute (short-term) toxicity: Fish: Not available., Crustacea: EC50/48h 0.0203 ppm (Daphnia magna), Algae/aquatic plants: EC50/72h 0,06 mg/L - 0,99 mg/L (Chlorella vulgaris), Other organisms: Not available. Chronic (long-term) toxicity: Fish: Not available., Crustacea: Not available., Algae/aquatic plants: Not available., Other organisms: Not available.
Reaction Mass Of Ethylbenzene And Xylene. Acute (short-term) toxicity: Fish: LC50/96h - 2.6 mg/l, Crustacea: EC50/48h 1-10 mg/l (Daphnia magna), Algae/aquatic plants: EC50/72h 2.2 mg/L (Pseudokirchneriella subcapitata), Other organisms: Not available. Chronic (long-term) toxicity: Fish: NOEC >1.3 mg/L (Salmo gairdneri), Crustacea: NOEC 0.96mg/L, Algae/aquatic plants: NOEC 0.44mg/L, Other organisms: Not available.

Substance name - Species - Exposure - Results

Rosin. Acute (short-term) toxicity: Fish: Not available., Crustacea: Not available., Algae/aquatic plants: Not available., Other organisms: Not available. Chronic (long-term) toxicity: Fish: Not available., Crustacea: Not available., Algae/aquatic plants: Not available., Other organisms: Not available.

Zinc Oxide. Acute (short-term) toxicity: Fish: LC50 0,169 mg Zn/l (Oncorrhynchus Mykiss), Crustacea: EC50/48h - 0.413 mg/l (Ceriodaphnia dubia), Algae/aquatic plants: EC50/72h - 0,137 mg/l (Selenastrum Capricornutum), Other organisms: Not available. Chronic (long-term) toxicity: Fish: NOEC 0.025 mg Zn/l, Crustacea: NOEC 82 ug/l, Algae/aquatic plants: NOEC 19 ug/l (Pseudokirchneriella subcapitata), Other organisms: Not available.

Hydrocarbons, C10, Aromatics, <1% Naphthalene. Acute (short-term) toxicity: Fish: LC50/96h >=2<=5 mg/l (Oncorhynchus mykiss), Crustacea: EC50/48h >=3<=10 mg/l (Daphnia magna), Algae/aquatic plants: EC50/72h 11 mg/l (Pseudokirchneriella Subcapitata), Other organisms: Not available. Chronic (long-term) toxicity: Fish: NOELR 0.441 mg/L, Crustacea: NOELR 0.771 mg/L, Algae/aquatic plants: Not available., Other organisms: Not available.

Pyrithione Zinc. Acute (short-term) toxicity: Fish: LC50 /96h - 0,0026 mg/l (Pimephales promelas), Crustacea: EC50/48h - 0,0082 mg/L (Daphnia magna), Algae/aquatic plants: EC50/120h - 0,0012 mg/l (Skeletonema costatum), Other organisms: Not available. Chronic (long-term) toxicity: Fish: Not available., Crustacea: Not available., Algae/aquatic plants: Not available., Other organisms: Not available.

1-Methoxy-2-Propanol. Acute (short-term) toxicity: Fish: LC50/96h 6812 mg/l (Leuciscus Idus), Crustacea: EC50/48h 23300 mg/l (Daphnia magna), Algae/aquatic plants: EC50/7d >1000 mg/L (Pseudokirchneriella subcapitata), Other organisms: Not available. Chronic (long-term) toxicity: Fish: Not available., Crustacea: Not available., Algae/aquatic plants: Not available., Other organisms: Not available.

Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate. Acute (short-term) toxicity: Fish: LC50/96h 0,6mg/l (Oncorhynchuss mykiss), Crustacea: EC50/48h 0,146mg/l (Daphnia magna), Algae/aquatic plants: EC50/72h0,4042mg/l (Desmodesmus subspicatus), Other organisms: Not available. Chronic (long-term) toxicity: Fish: NOEC 0,01mg/l (Jordanella floridae), Crustacea: NOEC 0,1 mg/L (Daphnia magna), Algae/aquatic plants: NOEC 0,016mg/l (Desmodesmus subspicatus, Other organisms: Not available.

12.2. Persistence and degradability

Substance name

Cuprous Thiocyanate. - Readily biodegradable.

Reaction Mass Of Ethylbenzene And Xylene. - Readily biodegradable.

Rosin. - Readily biodegradable.

Zinc Oxide. - Readily biodegradable.

Hydrocarbons, C10, Aromatics, <1% Naphthalene. - Inherently biodegradable.

Pyrithione Zinc. - Inherently biodegradable.

1-Methoxy-2-Propanol. - Readily biodegradable.

Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate. - Readily biodegradable.

12.3. Bioaccumulative potential

Substance name	log Kow	BCF
Cuprous Thiocyanate.	Kp 2120l/kg	Not available.
Reaction Mass Of Ethylbenzene And Xylene.	3,1	25,9
Rosin.	Not available.	<25-130
Zinc Oxide.	Not available.	Not available.
Hydrocarbons, C10, Aromatics, <1% Naphthalene.	Not available.	Not available.
Pyrithione Zinc.	0,93	1,4
1-Methoxy-2-Propanol.	-0,43	Not available.
Reaction Mass Of 3-Methylphenyl Di-4-Methylphenyl Phosphate And 4-Methylphenyl Di-3-Methylphenyl Phosphate And Tris(3-Methylphenyl)Phosphate.	5,93	800 L/kg ww

12.4. Mobility in soil

Soil/water partition coefficient (KOC) : Not available.
Mobility : No relevant information.

12.5. Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6. Endocrine disrupting properties

No relevant information.

12.7. Other adverse effects

No relevant information.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product / Packaging disposal: Dispose of containers contaminated by the product in accordance with local or national legal provisions. The European Waste Catalogue (2000/532/EC) classification of this product. Waste codes / waste designations according to LoW: 07 04 99 Wastes not otherwise specified. 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. Waste should not be disposed of by release to sewers. Using information provided in this safety data sheet, advice should be obtained from the local waste authority on the classification of empty containers.

Containers which are not properly cleaned may contain (highly) flammable or explosive vapours.
Special precautions: Use appropriate protective equipment for the removal and / or disposal of this product.

SECTION 14: Transport information

	ADR / RID / ADN	IMDG-Code	IATA
14.1. UN number or ID number	UN 1263	UN 1263	UN 1263
14.2. UN proper shipping name	PAINT	PAINT	PAINT
14.3. Transport hazard class(es)	3	3	3
Label(s)			
14.4. Packing group	III	III	III
14.5. Environmental hazards	Yes Environmental hazardous substances (aquatic environment) 	Yes Marine Pollutant: Yes  Marine Pollutant substance(s): Cuprous Thiocyanate., Zinc Oxide.	No
Additional information	Hazard Identification Number No.: 30	Emergency Schedule Number (EmS): F-E, S-E	

14.6. Special precautions for user

Transport within the 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.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

This antifouling paint is registered for use in Ireland under PCS 93224,218,229,231,232
The information in this Safety Data Sheet is required pursuant to
Annex II to regulation (EC) No 1907/2006 and its amendments.
The provisions of the Health and Safety at Work etc. Act [and the Control of Substances Hazardous to Health Regulations] apply to the use of this product at work.
The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.

* Active substance:	Cuprous Thiocyanate. / CAS 1111-67-7	300g/kg.
	Pyrithione Zinc. / CAS 13463-41-7	30g/kg.

* Note: Values given are based on theoretical calculations. Actual values could differ.

Seveso category (DIRECTIVE 2012/18/EU): P5c - E1 This product may add to the calculation for determining whether a site is within scope of the Seveso Directive on major accident hazards.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

H226	Measured
H332	Summation method (ATE)
H315	Additivity approach
H318	Additivity approach
H317	Concentration limit
H360	Concentration limit
H335	Additivity approach
H373	Concentration limit
H400	Summation method
H410	Summation method

Abbreviations and acronyms:

ADN	: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	: Acute Toxicity Estimate
BCF	: Bioconcentration factor
CLP	: Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DNEL	: Derived No Effect Level
IATA	: International Air Transport Association
IMDG-Code	: International Maritime Dangerous Goods
Kow	: octanol-water partition coefficient
LC50	: Lethal Concentration to 50 % of a test population
LD50	: Lethal Dose to 50% of a test population (Median Lethal Dose)
PBT	: Persistent, Bioaccumulative and Toxic substance

PNEC : Predicted No Effect Concentration(s)
RID : Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT : Specific Target Organ Toxicity
vPvB : Very Persistent and Very Bioaccumulative

Full text of Hazard Statements appearing in Section 3.2.:

EUH032 Contact with acids liberates very toxic gas.
EUH066 Repeated exposure may cause skin dryness or cracking.
H226 Flammable liquid and vapour.
H301 Toxic if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H360Df May damage the unborn child. Suspected of damaging fertility.
H361fd(*) Suspected of damaging fertility or the unborn child if swallowed.
H372 Causes damage to organs through prolonged or repeated exposure.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

Amendments: 19-10-2021, §2,3,8,9,11,12,15&16
This product does not contain organotin compounds acting as biocides and complies with the "International convention on the control of harmful Anti-fouling systems on ships as adopted by IMO in october 2001 (IMO document AFS/CONF/26)".

The information of this SDS is based on the present state of our knowledge and on current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier’s control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.