



# SAFETY DATA SHEET

Raincoat™ APA

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

### 1.1 Product identifier

**Product name** : Raincoat™ APA

**Product description** : Paint.

**Product type** : Liquid.

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

Not applicable.

### 1.3 Details of the supplier of the safety data sheet

Tor Coatings Limited  
Portobello Industrial Estate  
Birtley  
County Durham  
United Kingdom  
DH3 2RE  
Telephone no.: +44 (0) 191 4106611  
Fax no.: +44 (0) 191 4920125  
enquiries@tor-coatings.com

**e-mail address of person responsible for this SDS** : rpmeurohas@ro-m.com

### 1.4 Emergency telephone number

**Telephone number** : +44 (0) 207 858 1228

**Hours of operation** : 24 / 7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

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

Flam. Liq. 3, H226  
STOT SE 3, H336  
STOT RE 2, H373  
Aquatic Chronic 2, H411

#### Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : R10  
R66, R67  
N; R51/53

## SECTION 2: Hazards identification

- Physical/chemical hazards** : Flammable.
- Human health hazards** : Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.
- Environmental hazards** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

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

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : Flammable liquid and vapour.  
May cause drowsiness or dizziness.  
May cause damage to organs through prolonged or repeated exposure.  
Toxic to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Avoid breathing dust.

**Response** : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Call a doctor if you feel unwell.

**Storage** : Store in a well-ventilated place. Keep cool. Store locked up.

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

**Supplemental label elements** : Contains 2-butanone oxime. May produce an allergic reaction.

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

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Other hazards which do not result in classification** : None known.

### SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
trizinc bis (orthophosphate)	REACH #: 02-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	2.5 - <25	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
hydrocarbons, aromatic, C9	REACH #: 01-2119455851-35 EC: 918-668-5 Index: 649-356-00-4	10 - <15	R10 Xn; R65 Xi; R37 R66, R67 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H335 and H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	REACH #: 01-2119463258-33 EC: 919-857-5 Index: 649-327-00-6	10 - <15	R10 Xn; R65 R66, R67	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304	[1] [2]
hydrocarbons, C9-C12, n-/ iso-/ cyclo-alkanes, aromatics (2-25%)	REACH #: 01-2119458049-33 EC: 919-446-0 Index: 649-330-00-2	2.5 - <10	R10 Xn; R65 R66, R67 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]
2-methoxy-1-methylethyl acetate	REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	5 - <10	R10	Flam. Liq. 3, H226	[2]
quartz, respirable fraction	EC: 238-878-4 CAS: 14808-60-7	<10	Xn; R48/20	STOT RE 1, H372	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	0.25 - <2.5	N; R50/53	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
2-butanone oxime	EC: 202-496-6 CAS: 96-29-7 Index: 616-014-00-0	0.1 - <1	Carc. Cat. 3; R40 Xn; R21 Xi; R41 R43	Acute Tox. 4, H312 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351	[1]
			<b>See Section 16 for the full text of the R-phrases declared above.</b>	<b>See Section 16 for the full text of the H statements declared above.</b>	

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

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

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

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

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

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

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

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

Contains 2-butanone oxime. May produce an allergic reaction.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

## SECTION 5: Firefighting measures

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.
- Additional information** : No unusual hazard if involved in a fire.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional information on hygiene measures.

### 6.2 Environmental precautions

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

### 6.3 Methods and materials for containment and cleaning up

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

### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

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

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

## SECTION 7: Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations.

#### Notes on joint storage

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

#### Additional information on storage conditions

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

### 7.3 Specific end use(s)

#### Recommendations

: Not available.

#### Industrial sector specific solutions

: Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	<b>EH40/2005 WELs (United Kingdom (UK), 8/2007).</b> STEL: 850 mg/m <sup>3</sup> , (as turpentine) 15 minutes. Form: Vapour TWA: 566 mg/m <sup>3</sup> , (as turpentine (100 ppm)) 8 hours. Form: Vapour
hydrocarbons, C9-C12, n-/ iso-/ cyclo-alkanes, aromatics (2-25%)	<b>CEFIC-ESIG (Europe, 1/2011). Notes: Recommended by manufacturer</b> TWA: 300 mg/m <sup>3</sup> , ((52 ppm)) 8 hours. Form: Vapour
2-methoxy-1-methylethyl acetate	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin.</b> STEL: 548 mg/m <sup>3</sup> 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m <sup>3</sup> 8 hours. TWA: 50 ppm 8 hours.
quartz, respirable fraction	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> TWA: 0.1 mg/m <sup>3</sup> 8 hours. Form: respirable dust

#### Recommended monitoring procedures

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

#### DNELs/DMELs

**SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Type	Exposure	Value	Population	Effects
trizinc bis(orthophosphate)	DNEL	Long term Inhalation	5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	2.5 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	0.83 mg/kg bw/day	Consumers	Systemic
hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics	DNEL	Long term Dermal	208 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	871 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral, Dermal	125 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	185 mg/m <sup>3</sup>	Consumers	Systemic
hydrocarbons, C9-C12, n-/ iso-/ cyclo-alkanes, aromatics (2-25%)	DNEL	Long term Dermal	44 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	330 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	71 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral, Dermal	26 mg/kg bw/day	Consumers	Systemic
2-methoxy-1-methylethyl acetate	DNEL	Long term Inhalation	275 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	153.5 mg/m <sup>3</sup>	Workers	Systemic
zinc oxide	DNEL	Long term Dermal	54.8 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	1.67 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Inhalation	5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	2.5 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	0.83 mg/kg bw/day	Consumers	Systemic

**PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
trizinc bis(orthophosphate)	Fresh water	48.1 µg/l	-
	Marine	14.2 µg/l	-
	Fresh water sediment	550.2 mg/kg	-
	Marine water sediment	263.9 mg/kg	-
	Soil	249.4 mg/kg	-
	Sewage Treatment Plant	121.4 µg/l	-
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	-
	Fresh water sediment	3.29 mg/kg	-
	Marine water sediment	0.329 mg/kg	-
	Soil	0.29 mg/kg	-
	Sewage Treatment Plant	100 mg/l	-
zinc oxide	Fresh water	25.6 µg/l	-
	Marine	7.6 µg/l	-

**SECTION 8: Exposure controls/personal protection**

	Sewage Treatment Plant	64.7 µg/l	-
	Fresh water sediment	146 mg/kg dwt	-
	Marine water sediment	70.3 mg/kg dwt	-
	Soil	44.3 mg/kg dwt	-

**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 vapours below the OEL, suitable respiratory protection must be worn.

**Individual protection measures**

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

**Eye/face protection** : Safety glasses with side shields. (EN166)

**Skin protection**

**Hand protection**

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

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

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

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

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

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: > 8 hours (breakthrough time): neoprene-nitrile rubber

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374-3 : 2003

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

**Body protection** : Personnel should wear antistatic clothing made of natural fibres or of high-temperature-resistant synthetic fibres. (EN 1149-1)

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

**Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

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

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Recommended: organic vapour (Type A) and particulate filter (EN 141)



## SECTION 8: Exposure controls/personal protection

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

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: Various
<b>Odour</b>	: Hydrocarbon.
<b>pH</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flash point</b>	: Closed cup: 37°C
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Lower: 0.6% Upper: 8%
<b>Vapour pressure</b>	: Not available.
<b>Vapour density</b>	: >1 [Air = 1]
<b>Relative density</b>	: 1.37
<b>Solubility(ies)</b>	: Insoluble in the following materials: cold water and hot water.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Kinematic (40°C): 4.74 cm <sup>2</sup> /s
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.

### 9.2 Other information

No additional 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** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

## SECTION 10: Stability and reactivity

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO<sub>2</sub> and smoke can be generated.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

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

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

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

Contains 2-butanone oxime. May produce an allergic reaction.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
trizinc bis(orthophosphate)	LC50 Inhalation Dusts and mists	Rat	>5.7 mg/l	4 hours
hydrocarbons, aromatic, C9	LD50 Oral	Rat	>5000 mg/kg	-
	LD50 Oral	Mouse	8400 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
hydrocarbons, C9-C12, n-/iso-/cyclo-alkanes, aromatics (2-25%)	LC50 Inhalation Vapour	Rat	13.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>3200 mg/kg	-
	LD50 Dermal	Rat	>3400 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Oral	Rat	>5000 mg/kg	-
	LC50 Inhalation Vapour	Rat	4345 mg/l	6 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
zinc oxide	LD50 Oral	Rat	8532 mg/kg	-
	LC50 Inhalation Dusts and mists	Mouse	2500 mg/m <sup>3</sup>	4 hours
	LC50 Inhalation Dusts and mists	Rat	>5700 mg/m <sup>3</sup>	4 hours
2-butanone oxime	LD50 Oral	Rat	>15 g/kg	-
	LC50 Inhalation Vapour	Rat	>4416 mg/l	4 hours

**Conclusion/Summary** : Not available.

### Acute toxicity estimates

Not available.

### Irritation/Corrosion

## SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
hydrocarbons, aromatic, C9	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-
hydrocarbons, C9-C12, n-/iso-/ cyclo-alkanes, aromatics (2-25%)	Skin - Erythema/Eschar	Rabbit	1	-	-
zinc oxide	Eyes - Cornea opacity	Rabbit	1	-	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
2-butanone oxime	Eyes - Severe irritant	Rabbit	-	100 microliters	-

**Conclusion/Summary** : Not available.

### Sensitisation

Product/ingredient name	Route of exposure	Species	Result
hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics	skin	Rabbit	Not sensitizing
hydrocarbons, C9-C12, n-/iso-/ cyclo-alkanes, aromatics (2-25%)	skin	Rabbit	Not sensitizing

**Conclusion/Summary** : Not available.

### Mutagenicity

Product/ingredient name	Test	Experiment	Result
hydrocarbons, aromatic, C9	OECD 471	Subject: Bacteria	Negative
hydrocarbons, C9-C12, n-/iso-/ cyclo-alkanes, aromatics (2-25%)	OECD 471,473,474, 475,479	Subject: Bacteria	Negative

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
hydrocarbons, aromatic, C9	-	-	Negative	Mammal - species unspecified	Unreported	-

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
trizinc bis(orthophosphate)	Acute EC50 5.7 mg/l	Daphnia spec. - ceriodaphnia dubia	48 hours
	Acute IC50 1.87 mg/l	Algae - selenastrum capricornutum	72 hours
hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics	Acute NOEC 100 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 0.23 mg/l Chronic NOEC 0.131 mg/l	Daphnia spec. Fish	- -
hydrocarbons, C9-C12, n-/iso-/ cyclo-alkanes, aromatics (2-25%)	Acute EC50 10 to 22 mg/l	Daphnia spec.	48 hours
	Acute IC50 4.6 to 10 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute LC50 10 to 30 mg/l	Fish	96 hours
	Acute NOEC 1 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
2-methoxy-1-methylethyl acetate	Acute EC50 408 to 500 mg/l	Daphnia spec.	48 hours
	Acute LC50 161 mg/l	Fish	96 hours
2-butanone oxime	Acute LC50 100 to 180 mg/l	Fish	96 hours
	Acute EC50 750 mg/l	Daphnia spec.	48 hours
	Acute IC50 83 mg/l Acute LC50 843000 µg/l Fresh water	Algae Fish - Pimephales promelas	72 hours 96 hours

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics	OECD 301B	>80 % - Readily - 28 days	-	-
	OECD 301F	>80 % - Readily - 28 days	-	-
hydrocarbons, C9-C12, n-/iso-/ cyclo-alkanes, aromatics (2-25%)	-	74.7 % - Readily - 28 days	-	-
	-	-	-	-

**Conclusion/Summary** : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
hydrocarbons, aromatic, C9	-	-	Readily
hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics	-	100%; < 28 day(s)	Readily
hydrocarbons, C9-C12, n-/iso-/ cyclo-alkanes, aromatics (2-25%)	-	-	Readily
2-methoxy-1-methylethyl acetate	-	-	Readily
2-butanone oxime	-	-	Readily

### 12.3 Bioaccumulative potential

## SECTION 12: Ecological information

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
hydrocarbons, aromatic, C9	3.7 to 4.5	-	high
hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2%	5 to 6.5	-	high
aromatics			
2-methoxy-1-methylethyl acetate	0.43	-	low
2-butanone oxime	0.59	5.01	low

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Volatile.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

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

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

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

**Hazardous waste** : Yes.

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

#### European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

#### Packaging




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

**Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Not emptied containers are hazardous waste.

## SECTION 13: Disposal considerations

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	UN1263	UN1263	UN1263
<b>14.2 UN proper shipping name</b>	Paint. [hydrocarbons, aromatic, C9]	Paint. [hydrocarbons, aromatic, C9]	Paint. [hydrocarbons, aromatic, C9]
<b>14.3 Transport hazard class(es)</b>	3 	3 	3 
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.
<b>Additional information</b>	<p><b>Limited quantity:</b> LQ7</p> <p><b>Remarks:</b> (≤ 5L: ) Limited Quantity - ADR/IMDG 3.4</p> <p>ADR Tunnel code: (D/E)</p>	<p><b>Emergency schedules (EmS):</b> F-E + S-E</p> <p><b>Marine pollutant (P)</b></p> <p><b>Remarks:</b> (≤ 5L: ) Limited Quantity - ADR/IMDG 3.4.6</p>	<p><b>Passenger and Cargo Aircraft</b> Quantity limitation: 60 L Packaging instructions: 355</p> <p><b>Cargo Aircraft Only</b> Quantity limitation: 220 L Packaging instructions: 366</p> <p><b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 10 L Packaging instructions: Y 344</p>

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

## SECTION 15: Regulatory information

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

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. The provisions of the national health and safety at work regulations apply to the use of this product at work.

**CN code** : 3209 90 91

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

#### Annex XIV - List of substances subject to authorisation

##### Annex XIV

None of the components are listed.

##### Substances of very high concern

None of the components are listed.

## SECTION 15: Regulatory information

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

### Other EU regulations

**VOC for Ready-for-Use Mixture** : 2004/42/EC - IIA/i: 600g/l (2007) 500g/l (2010). <= 410g/l VOC.

**Europe inventory** : Not determined.

**Priority List Chemicals (793/93/EEC)** : Listed

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
2-butanone oxime	Carc. Cat. 3; R40	-	-	-

### National regulations

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

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

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

Classification	Justification
Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 2, H373 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method

**Full text of abbreviated H statements** :

- H226 Flammable liquid and vapour.
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation. May cause drowsiness or dizziness.
- and
- H336
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.
- H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
- 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.

**SECTION 16: Other information**

**Full text of classifications [CLP/GHS]** : Acute Tox. 4, H312 ACUTE TOXICITY: SKIN - Category 4  
 Aquatic Acute 1, H400 AQUATIC TOXICITY (ACUTE) - Category 1  
 Aquatic Chronic 1, H410 AQUATIC TOXICITY (CHRONIC) - Category 1  
 Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2  
 Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1  
 Carc. 2, H351 CARCINOGENICITY - Category 2  
 Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3  
 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1  
 STOT RE 1, H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): INHALATION [respiratory tract] - Category 1  
 STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2  
 STOT SE 3, H335 and H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation and Narcotic effects] - Category 3  
 STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Narcotic effects] - Category 3

**Full text of abbreviated R phrases** : R10- Flammable.  
 R40- Limited evidence of a carcinogenic effect.  
 R21- Harmful in contact with skin.  
 R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.  
 R65- Harmful: may cause lung damage if swallowed.  
 R41- Risk of serious damage to eyes.  
 R37- Irritating to respiratory system.  
 R43- May cause sensitisation by skin contact.  
 R66- Repeated exposure may cause skin dryness or cracking.  
 R67- Vapours may cause drowsiness and dizziness.  
 R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
 R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of classifications [DSD/DPD]** : Carc. Cat. 3 - Carcinogen category 3  
 Xn - Harmful  
 Xi - Irritant  
 N - Dangerous for the environment

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**Notice to reader**

***The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.***