Interpon®

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

SAFETY DATA SHEET

UB103L INTERPON EC 1201 RAL9003CA SN57 25KG

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

1.1 Product identifier

Product name : UB103L INTERPON EC 1201 RAL9003CA SN57 25KG

SDS code : 8273108
UB103L/25KG

UFI : VFGH-0045-N00P-5F7J

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

Identified uses
Industrial use

Uses advised against
Consumer use

Product use : Electrostatic coating for use in industrial plants

1.3 Details of the supplier of the safety data sheet

AkzoNobel Powder Coatings Limited
Stoneygate Lane,
Felling,
Gateshead.
NE10 0JY
United Kingdom

e-mail address of person responsible for this SDS : sdsfellinguk@akzonobel.com

National contact

01 8092566 or 01 8379964

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : +44 (0)344 892 0111

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]

Skin Sens. 1A, H317
STOT RE 1, H372
Aquatic Chronic 3, H412

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

SECTION 2: Hazards identification

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

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

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : H317 - May cause an allergic skin reaction.
H372 - Causes damage to organs through prolonged or repeated exposure.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention : P280 - Wear protective gloves.
P273 - Avoid release to the environment.
P260 - Do not breathe dust or mist.
P270 - Do not eat, drink or smoke when using this product.

Response : P391 - Collect spillage.
P314 - Get medical advice/attention if you feel unwell.
P302 + P352 - IF ON SKIN: Wash with plenty of water.
P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.
P362 + P364 - Take off contaminated clothing and wash it before reuse.

Storage : Not applicable.

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

Supplemental label elements : Contains isocyanates. 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

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : May form explosible dust-air mixture if dispersed.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked	REACH #: 01-2119979523-27 EC: 273-482-5 CAS: 127184-53-6	≥10 - ≤15	STOT RE 1, H372 (lungs) (inhalation)	-	[1]
propylidynetrimethanol	REACH #: 01-2119486799-10 EC: 201-074-9 CAS: 77-99-6	≤1	Repr. 2, H361	-	[1]
3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane	REACH #: 01-2119977073-34 EC: 247-952-5 CAS: 26741-53-7	≤1	Aquatic Chronic 1, H410	M [Chronic] = 1	[1]
ε-caprolactam	REACH #: 01-2119457029-36 EC: 203-313-2 CAS: 105-60-2 Index: 613-069-00-2	<1	Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	ATE [Oral] = 500 mg/kg ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[1] [2]
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	REACH #: 01-2119490408-31 EC: 223-861-6 CAS: 4098-71-9	<0.1	Acute Tox. 1, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT SE 3, H335 Aquatic Chronic 2, H411 EUH071 **See Section 16 for the full text of the H statements declared above.**	ATE [Inhalation (dusts and mists)] = 0.03 mg/l Resp. Sens. 1, H334: C ≥ 0.5% Skin Sens. 1A, H317: C ≥ 0.001%	[1] [2]

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

Type

[1] Substance classified with a physical, health or environmental hazard
[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention following exposure or if feeling unwell.

SECTION 4: First aid measures

Inhalation : Get medical attention following exposure or if feeling unwell. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

Skin contact : Get medical attention following exposure or if feeling unwell. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : Get medical attention following exposure or if feeling unwell. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
irritation
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
irritation
redness

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

Suitable extinguishing media : Use dry chemical powder.

Unsuitable extinguishing media : Avoid high pressure media which could cause the formation of a potentially explosible dust-air mixture.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

Hazards from the substance or mixture : May form explosible dust-air mixture if dispersed. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor.

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

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe dust. Do not ingest. Avoid release to the environment. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Recommended monitoring procedures : 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
propylidynetrimethanol	DNEL	Long term Oral	0.34 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.34 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.58 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0.94 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.3 mg/m³	Workers	Systemic
3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane	DNEL	Long term Oral	0.39 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.39 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.68 mg/m³	General population	Systemic
	DNEL	Long term Dermal	0.78 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2.75 mg/m³	Workers	Systemic
ε-caprolactam	DNEL	Long term Inhalation	2.5 mg/m³	General population	Local
	DNEL	Short term Inhalation	5 mg/m³	General population	Local
	DNEL	Long term Inhalation	5 mg/m³	Workers	Local
	DNEL	Long term Oral	8.55 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	10 mg/m³	Workers	Local
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	DNEL	Short term Inhalation	0.045 mg/m³	Workers	Local
	DNEL	Long term Inhalation	0.045 mg/m³	Workers	Local

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5] undecane	Fresh water	0.002 mg/l	Assessment Factors
	Sewage Treatment Plant	42 mg/l	Assessment Factors
	Fresh water sediment	2000000 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	200000 mg/kg dwt	Equilibrium Partitioning
	Soil	1 mg/kg dwt	Assessment Factors
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Fresh water	0.027 mg/l	Assessment Factors
	Sewage Treatment Plant	10.6 mg/l	Assessment Factors
	Fresh water sediment	98.51 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	1.46 mg/kg dwt	Equilibrium Partitioning
	Soil	19.8 mg/kg dwt	Equilibrium Partitioning

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

For all types of exposure, a glove with protection class of 2 or higher (breakthrough time >30 minutes according to EN374) is recommended. Recommended gloves: Nitrile, thickness ≥ 0.12 mm.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.

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

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 : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Personnel should wear protective clothing. Care should be taken in the selection of protective clothing to ensure that inflammation and irritation of the skin at the neck and wrists through contact with the powder are avoided.

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 : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flatting should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

SECTION 8: Exposure controls/personal protection

Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Solid.

Colour : White.

Odour : Odourless.

Odour threshold : Not available.

Melting point/freezing point : Not available.

Flammability : Not available.

Lower and upper explosion limit : 20 - 70 g/m3

Auto-ignition temperature : 450 to 600°C (842 to 1112°F)

Decomposition temperature : Not available.

pH : Not applicable. [DIN EN 1262]

Viscosity : Dynamic (room temperature): Not available.
Kinematic (room temperature): Not applicable. [DIN EN ISO 3219]
Kinematic (40°C): Not applicable. [DIN EN ISO 3219]

Solubility(ies) :

Media	Result
cold water cold water	Not soluble [OECD (TG 105)] Not soluble [OECD (TG 105)]

Partition coefficient: n-octanol/water : Not applicable.

Vapour pressure : Not available.

Relative density : 1.2 to 1.9 [ISO 8130-2/-3]

Vapour density : Not applicable.

Particle characteristics

Median particle size : Not available.

Percentage of particles with aerodynamic diameter ≤ 10 µm : 0

9.2 Other information

Minimum ignition energy (mJ) : 5 to 20

Fundamental burning velocity : Not applicable.

SADT : Not available.

Heat of combustion : Not available.

Aerosol product

Type of aerosol : Not applicable.

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 : The product is stable.

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

10.4 Conditions to avoid : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.

10.5 Incompatible materials : Reactive or incompatible with the following materials:
oxidising materials

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

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

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
propylidynetrimethanol	LD50 Oral	Mouse	13700 mg/kg	-
	LD50 Oral	Mouse	14000 mg/kg	-
	LD50 Oral	Rat	14100 mg/kg	-
	LD50 Oral	Rat	14000 mg/kg	-
3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5] undecane	LD50 Oral	Rat	5580 mg/kg	-
ε-caprolactam	LC50 Inhalation Dusts and mists	Rat	300 mg/m³	2 hours
	LD50 Dermal	Rabbit	1410 uL/kg	-
	LD50 Intraperitoneal	Mouse	650 mg/kg	-
	LD50 Intravenous	Mouse	480 mg/kg	-
	LD50 Oral	Mouse	930 mg/kg	-
	LD50 Oral	Rat	1210 mg/kg	-
	LD50 Route of exposure unreported	Mouse	930 mg/kg	-
	LD50 Route of exposure unreported	Rabbit	1 g/kg	-
	LD50 Route of exposure unreported	Rat	580 mg/kg	-
	LD50 Subcutaneous	Mouse	750 mg/kg	-
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	LC50 Inhalation Dusts and mists	Rat	40 mg/m³	4 hours
	LC50 Inhalation Dusts and mists	Rat	123 mg/m³	4 hours

SECTION 11: Toxicological information

	LD50 Oral	Rat	4825 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
ε-caprolactam 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	500 N/A	N/A N/A	N/A N/A	N/A N/A	1.5 0.03

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5] undecane	Skin - Severe irritant	Rabbit	-	0.5 gm	-
ε-caprolactam	Eyes - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Conclusion/Summary : Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	skin	Guinea pig	Sensitising

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ε-caprolactam	Category 3	-	Respiratory tract irritation
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl) -1,3,3-trimethyl-, homopolymer, caprolactam-blocked	Category 1	inhalation	lungs

SECTION 11: Toxicological information

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the eyes.

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits may cause irritation of the nose, throat and lungs.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
irritation
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : Causes damage to organs through prolonged or repeated exposure. Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation. 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.

Reproductive toxicity : No known significant effects or critical hazards.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

SECTION 11: Toxicological information

No additional information.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.
Coating powder residues should not be allowed to enter drains or watercourses or be deposited where they could affect ground or surface waters.

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

Product/ingredient name	Result	Species	Exposure
propylidynetrimethanol	Acute EC50 13000000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 14400000 µg/l Marine water	Fish - *Cyprinodon variegatus*	96 hours
3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5] undecane	EC50 97 mg/l	Algae	72 hours
	LC50 70.7 mg/l	Fish	96 hours
ε-caprolactam	Acute EC50 4550 mg/l Fresh water	Algae - *Pseudokirchneriella subcapitata* - Exponential growth phase	72 hours
	Acute EC50 2430 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Chronic NOEC 1250 mg/l Fresh water	Algae - *Pseudokirchneriella subcapitata* - Exponential growth phase	72 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
propylidynetrimethanol	-0.47	<1 [OECD 305 C]	Low
ε-caprolactam	0.12	-	Low
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	0.99	-	Low

12.4 Mobility in soil

Soil/water partition coefficient : Not available.

Mobility : Not available.

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

Not available.

SECTION 12: Ecological information

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

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

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 : The classification of the product may meet the criteria for a hazardous waste.

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
EWC 08 02 01	waste coating powders

Packaging

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

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

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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-

SECTION 14: Transport information

14.5 Environmental hazards	No.	No.	No.

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.

14.7 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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

Synthetic polymer microparticles - Designation 78

Generic identity of polymer(s) : Refer to Product Data Sheet.

Total percentage of synthetic polymer microparticles : 100%

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.

Other EU regulations

VOC : Not applicable.

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

Industrial emissions (integrated pollution prevention and control) - Air : Not listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances (EU 2024/590)

Not listed.

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

SECTION 15: Regulatory information

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

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
N/A = Not available
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
SGG = Segregation Group
vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Skin Sens. 1A, H317 STOT RE 1, H372 Aquatic Chronic 3, H412	Calculation method Calculation method Calculation method

Full text of abbreviated H statements

SECTION 16: Other information

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
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.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Acute Tox. 1	ACUTE TOXICITY - Category 1
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Resp. Sens. 1	RESPIRATORY SENSITISATION - Category 1
Skin Corr. 1	SKIN CORROSION/IRRITATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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Notice to reader

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IMPORTANT NOTE: The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of

SECTION 16: Other information

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