

Ultra Shine D0

Section 1. Chemica	al product and company identification
Product name	: Ultra Shine DO
Product code	: 33124
Product type	: Powder coating.
	e substance or mixture and uses advised against
Use in coatings - Industrial use	
Supplier's details	: 佐敦涂料(张家港)有限公司 中国江苏扬子江国际化学工业园南海路39号 215634 电话: +86 512 58937988 传真: +86 512 58937986 Jotun Coatings (Zhangjiagang) Co. Ltd
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Section 2. Hazards identification

Classification of the substance or mixture according to GB 13690-2009 and GB 30000-2013

Classification of the substance or mixture

: SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

<u>GHS label elements</u> Hazard pictograms	:	
Signal word	: Warning.	

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: 03.01.2024 Date of

Date of previous issue :

:03.01.2024

Section 2. Hazards identification

Hazard statements	1	H373 - May cause damage to organs through prolonged or repeated exposure.
Precautionary statements		
General	:	Not applicable.
Prevention	:	P260 - Do not breathe dust.
Response	1	P314 - Get medical advice/attention if you feel unwell.
Storage	1	Not applicable.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Physical and chemical hazards	:	No known significant effects or critical hazards.
Health hazards	:	No known significant effects or critical hazards.

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.

Ingredient name	%	CAS number
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked	≤3	127184-53-6

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 and hence require reporting in this section.

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	 Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell.
Inhalation	: 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. Get medical attention following exposure or if feeling unwell. 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.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: 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. Get medical attention following exposure or if feeling unwell. 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.

Section 4. First aid measures

Most important symptoms/e	ffects, acute and delayed
Potential acute health effe	<u>ots</u>
Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
<u>Over-exposure signs/symp</u>	<u>ptoms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate med	dical attention and special treatment needed, if necessary
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Specific hazards arising from the chemical	: No specific fire or explosion hazard.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide
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.
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.
Fire/explosion hazards	: Fine dust clouds may form explosive mixtures with air.

Section 6. Accidental release measures

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. 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".

Section 6. Accidental release measures

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).
Methods and material for con	tainment and cleaning up
Small spill	: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	: Move containers from spill area. 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. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	:	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. 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.
Conditions for safe storage, including any incompatibilities	:	Store in accordance with local regulations. 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. 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.

See Technical Data Sheet / packaging for further information.

Section 8. Exposure controls/personal protection

Control parameters

Dust Limit : 10 mg/m³ (TWA of total inhalable dust) and 4 mg/m³ (TWA of respirable) <u>Occupational exposure limits</u> None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls	: 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.
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.

Individual protection measures

Section 8. Exposure controls/personal protection

Coolion of Expeed	
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 eyewear complying to ISO 16321-1:2022 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.
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. For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.
	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.
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.

Section 9. Physical and chemical properties and safety characteristics

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

Appearance	
Physical state	: Solid. Powder.
Colour	: Various.
Odour	: Odourless.
Odour threshold	: Not applicable.
рН	: Not applicable.
Melting point (dust)	: 85 - 115 °C
Boiling point, initial boiling point, and boiling range	: Not applicable.
Flash point	: Not applicable.
Evaporation rate	: Not applicable.
Flammability	: Not applicable.

Section 9. Physical and chemical properties and safety characteristics

Lower explosion limit (dust)	: 3	0 g/m³ (EN 14034-3)
Minimum ignition energy (mJ)	: 1	0 - 30 (EN 13821)
Vapour pressure	: N	lot applicable.
Relative vapour density	: N	lot applicable.
Density	: 1	.2 to 1.9 g/cm ³
Solubility(ies)	:	
Media		Result
cold water hot water		Not soluble Not soluble
Solubility in water	: N	lot applicable.
Partition coefficient: n- octanol/water	: N	lot applicable.
Auto-ignition temperature	: >	400°C
Decomposition temperature	: 2	50°C (482°F)
Viscosity	: N	lot applicable.
Particle characteristics		
Median particle size	: N	lot available.
No additional information.		

Section 10. Stability and reactivity

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Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: No specific data.
Hazardous decomposition products	 Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Fine dust clouds may form exp	plosive mixtures with air.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Section 11. Toxicological information

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient nameCyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked		Category	Route of exposure inhalation	Target organs
		Category 1		
Aspiration hazard		·	·	·
Not available.				
nformation on likely routes f exposure	: Not available.			
Potential acute health effects	<u>5</u>			
Eye contact	: No known significant	effects or critical haz	zards.	
Inhalation : No known significant effects or critical hazards.				
Skin contact	C C C C C C C C C C C C C C C C C C C			
Ingestion	: No known significant effects or critical hazards.			
Symptoms related to the phy	vsical, chemical and tox	icological characte	<u>ristics</u>	
Eye contact	: No specific data.			
Inhalation	: No specific data.			
Skin contact	: No specific data.			
Ingestion	: No specific data.			
Delayed and immediate effect	ts as well as chronic ef	ffects from short an	d long-term expo	<u>sure</u>
<u>Short term exposure</u>				
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 effe	<u>ects</u>			
General	: May cause damage t	to organs through pro	olonged or repeate	d exposure.
Carcinogenicity	: No known significant	e e ,	•	•
	8			
Mutagenicity	: No known significant	effects or critical haz	zards.	

Numerical measures of toxicity Acute toxicity estimates

Date of issue/Date of revision

Section 11. Toxicological information

N/A

<u>Toxicity</u>				
Not available.				
Persistence/degrada	<u>bility</u>			
Not available.				
Bioaccumulative pot	tential			
Not available.				
<u>Mobility in soil</u>				
Soil/water partition coefficient (Koc)	: Not avail	able.		
Other adverse effect	s : No know	n significant effects or o	critical hazards.	
Section 13. D)isposal cons	iderations		
Section 13. D Disposal methods	: The gene Disposal with the r any regio products untreated with jurise should or container emptied of liners ma	eration of waste should of this product, solution requirements of enviror anal local authority requivia a licensed waste di to the sewer unless fu diction. Waste packag any be considered wher must be disposed of in containers that have no	imental protection and wirements. Dispose of sisposal contractor. Was sposal contractor. Was ing should be recycled. In recycling is not feasible a safe way. Care shout been cleaned or rinse residues. Avoid dispersent	should at all times comply waste disposal legislation an urplus and non-recyclable ste should not be disposed o equirements of all authorities Incineration or landfill e. This material and its uld be taken when handling d out. Empty containers or
Disposal methods	: The gene Disposal with the r any regio products untreated with jurise should or container emptied of liners ma	eration of waste should of this product, solution requirements of enviror anal local authority requive via a licensed waste di d to the sewer unless fu diction. Waste packag nly be considered when must be disposed of in containers that have no y retain some product act with soil, waterways	ns and any by-products imental protection and w irements. Dispose of su sposal contractor. Was illy compliant with the re- ing should be recycled. In recycling is not feasible in a safe way. Care sho to been cleaned or rinse residues. Avoid dispers	should at all times comply waste disposal legislation an urplus and non-recyclable ste should not be disposed o equirements of all authorities Incineration or landfill e. This material and its uld be taken when handling d out. Empty containers or
Disposal methods	: The gene Disposal with the r any regio products untreated with jurise should or container emptied liners ma and conta	eration of waste should of this product, solution requirements of enviror anal local authority requive via a licensed waste di d to the sewer unless fu diction. Waste packag nly be considered when must be disposed of in containers that have no y retain some product act with soil, waterways	ns and any by-products imental protection and w irements. Dispose of su sposal contractor. Was illy compliant with the re- ing should be recycled. In recycling is not feasible in a safe way. Care sho to been cleaned or rinse residues. Avoid dispers	should at all times comply waste disposal legislation an urplus and non-recyclable ste should not be disposed o equirements of all authorities Incineration or landfill e. This material and its uld be taken when handling d out. Empty containers or
Disposal methods	: The gene Disposal with the r any regio products untreated with jurise should or container emptied liners ma and container	eration of waste should of this product, solution requirements of enviror anal local authority requivia a licensed waste di d to the sewer unless fu diction. Waste packag hybe considered when must be disposed of in containers that have no by retain some product act with soil, waterways	ns and any by-products imental protection and w irements. Dispose of si sposal contractor. Was illy compliant with the re- ing should be recycled. In recycling is not feasible in a safe way. Care sho to been cleaned or rinse residues. Avoid dispers s, drains and sewers.	should at all times comply waste disposal legislation an urplus and non-recyclable ste should not be disposed o equirements of all authorities Incineration or landfill e. This material and its uld be taken when handling d out. Empty containers or sal of spilt material and runot

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.

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No.

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No.

shipping name

Packing group

Environmental

class(es)

hazards

Transport hazard

No.

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No.

Section 14. Transport information

Extinguishing media	
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: None known.
Incompatible materials	: No specific data.
Transport in bulk according	: Not available.

to IMO instruments

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product:

Law of the People's Republic of China on the Prevention and Control of Occupational Diseases

Regulations on the Control over Safety of Dangerous Chemicals Measures for Environmental Management of New Chemical Substances Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes Safety regulations for the use of chemicals in the workplace General Rule for Classification and Hazard Communication of Chemicals Classification and code of dangerous goods

List of Goods banned for Importing

None of the components are listed.

Drug Precursors Requiring an Import/Export License

None of the components are listed.

Inventory of Hazardous Chemicals

None of the components are listed.

List of Explosive Precursors

Ingredient name	CAS number		Reference number
Aluminium powder (stabilized)	7429-90-5	Listed	7.6

List of Goods banned for Exporting

None of the components are listed.

List of Toxic Chemicals Severely Restricted for Importing & Exporting by China

None of the components are listed.

Catalogue and classification of drug precursor chemicals

None of the components are listed.

Inventory of highly toxic articles

None of the components are listed.

Catalogue of Hazardous Chemicals of Priority Management

None of the components are listed.

Catalogue of Occupational Disease Hazard Factors - Dust

None of the components are listed.

Catalogue of Occupational Disease Hazard Factors - Chemical Factors

None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Section 15. Regulatory information

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.

Section 16. Other information

History

Date of printing	: 03.01.2024
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Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations

Procedure used to derive the classification

Classification	Justification
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2	Calculation method

References

: Not available.

Indicates information that has changed from previously issued version.

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.