

## Jotun Durasol 4003

### Section 1. Identification

GHS product identifier	: Jotun Durasol 4003
Other means of identification	: Not available.
Product code	: 19980
Product type	: Powder coating.

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

Identified uses Use in coatings - Industrial use			
Emergency telephone number	: Jotun Thailand Limited Phone: + 66 2 022 9888 ext. 3101, 2400, 2402		

## Section 2. Hazards identification

Classification of the substance or mixture	: SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
GHS label elements	
Signal word	: No signal word.
Hazard statements	: H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements	
Prevention	: P273 - Avoid release to the environment.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	: None known.

## Section 3. Composition/information on ingredients

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

CAS number/other identifiers		
CAS number	:	Not applicable.
EC number	:	Mixture.
Product code	:	19980
Floude		19900

Ingredient name	%	CAS number
bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate	≤0.3	41556-26-7
decanedioic acid, methyl 1,2,2,6,6-pentamethyl-4-piperidinyl ester	≤0.3	82919-37-7
propylidynetrimethanol	≤0.3	77-99-6

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. Get medical attention if irritation occurs.			
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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	<ul> <li>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</li> </ul>			
Ingestion	<ul> <li>Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.</li> </ul>			

#### Most important symptoms/effects, acute and delayed

Potential acute health effects		
Eye contact	1	No known significant effects or critical hazards.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	1	No known significant effects or critical hazards.
Ingestion	1	No known significant effects or critical hazards.
Over-exposure signs/symptom	<u>15</u>	
Eye contact	:	No specific data.
Inhalation	1	No specific data.
Skin contact	:	No specific data.
Ingestion	1	No specific data.

Indication of immediate medical attention and special treatment needed, if necessary					
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.				
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.				

See toxicological information (Section 11)

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## Section 5. Firefighting measures

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Extinguishing media Suitable extinguishing media Unsuitable extinguishing media	<ul><li>: Use an extinguishing agent suitable for the surrounding fire.</li><li>: None known.</li></ul>
Specific hazards arising from the chemical	: 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.
	Fine dust clouds may form explosive mixtures with air.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds carbonyl halides metal oxide/oxides
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.

### Section 6. Accidental release measures

Personal precautions, protectiv	uipment and emergency procedures			
For non-emergency personnel	No action shall be taken involving any personal risk or without suitable train Evacuate surrounding areas. Keep unnecessary and unprotected personne entering. Do not touch or walk through spilt material. Put on appropriate pe protective equipment.	el from		
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".			
Environmental precautions	Avoid dispersal of spilt material and runoff and contact with soil, waterways and sewers. Inform the relevant authorities if the product has caused envir pollution (sewers, waterways, soil or air). Water polluting material. May be to the environment if released in large quantities.	onmental		
Methods and material for containment and cleaning up				
Small spill	Move containers from spill area. Vacuum or sweep up material and place i	n a		

contractor.
 Large spill
 Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

designated, labelled waste container. Dispose of via a licensed waste disposal

### Section 7. Handling and storage

Precautions for safe handling : 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.

## Section 7. Handling and storage

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	
Occupational exposure limits	
Dust Limit : 10 mg/m³ (TWA	of total inhalable dust) and 4 mg/m³ (TWA of respirable)
Recommended monitoring procedures	: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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	
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	: 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.
	<ul> <li>There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.</li> <li>The breakthrough time must be greater than the end use time of the product.</li> <li>The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.</li> <li>Gloves should be replaced regularly and if there is any sign of damage to the glove material.</li> <li>Always ensure that gloves are free from defects and that they are stored and used correctly.</li> <li>The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.</li> </ul>
	Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.
	Wear suitable gloves tested to ISO 374-1:2016. Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber (> 0.75 mm), neoprene (> 0.35 mm), PVC (> 0.5 mm)

## Section 8. Exposure controls/personal protection

Body protection	<ul> <li>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.</li> </ul>
Other skin protection	<ul> <li>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.</li> </ul>
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.
	Self-contained respiratory equipment must be worn by spray operator, even when good ventilation is provided. By other operations than spraying, in well ventilated areas, air-fed respirators could be replaced by a combination charcoal filter and particulate filter mask.

## Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	1	Solid. Powder.
Colour	1	Various
Odour	1	Odourless.
Odour threshold	1	Not available.
рН	1	Not applicable.
Melting point	1	Not applicable.
Boiling point	1	Not available.
Flash point	1	Not applicable.
Burning time	1	Not available.
Burning rate	1	Not available.
Evaporation rate	1	Not available.
Flammability (solid, gas)	:	Not applicable.
Lower explosion limit	:	30 g/m³
Minimum ignition energy (mJ)	:	10 - 30
Vapour pressure	:	Highest known value: <0.01 kPa (<0.08 mm Hg) (at 20°C) (aluminum hydroxide).
Vapour density	1	Not available.
Relative density	1	1.2 to 1.5 g/cm <sup>3</sup>
Solubility	1	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not available.
Auto-ignition temperature	1	> 400°C
Decomposition temperature	:	>230°C (>446°F)
SADT	1	Not available.
Viscosity	1	Not applicable.
Aerosol product		

## Section 10. Stability and reactivity

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	: Keep away from: oxidising agents, strong alkalis, strong acids, amines, alcohols, water. Uncontrolled exothermic reactions occur with amines and alcohols.
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## Section 10. Stability and reactivity

Hazardous decomposition products

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

Fine dust clouds may form explosive mixtures with air.

### Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
propylidynetrimethanol	LD50 Oral	Rat	14000 mg/kg	-

### Irritation/Corrosion

Not available.

#### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate	skin skin	Mammal - species unspecified Mammal - species	Sensitising
decanedioic acid, methyl 1,2,2,6,6-pentamethyl- 4-piperidinyl ester	SKIN	Mammal - species unspecified	Sensitising

#### **Mutagenicity**

Not available.

### <u>Carcinogenicity</u>

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

#### Potential acute health effects

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.

#### Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: No specific data.
Ingestion	: No specific data.
Skin contact	: No specific data.
Eye contact	: No specific data.

Potential chronic health effects		
General	÷	Nc

: No known significant effects or critical hazards.

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## Section 11. Toxicological information

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

## Section 12. Ecological information

Toxicity

Not available.

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bis(1,2,2,6,6-pentamethyl- 4-piperidyl) sebacate decanedioic acid, methyl 1,2,2,6,6-pentamethyl- 4-piperidinyl ester	-		Not readily Not readily

#### Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
propylidynetrimethanol	-0.47	<1	low

Mobility in soil Soil/water partition coefficient (K <sub>oc</sub> )	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

# Section 13. Disposal considerations

Disposal methods : 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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

	UN	IMDG	ΙΑΤΑ
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.
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.	<b>Transport within user's</b> <b>premises:</b> 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.	<b>Transport within user's</b> <b>premises:</b> 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.
Additional information	-	-	-

Transport in bulk according to : Not available.

IMO instruments

ADR / RID

### Section 15. Regulatory information

Hazardous Substance Act B.E.	<u>2535 (1992)</u>		
<u>Type</u>			
Ingredient name	<u>Type</u>	<u>Authority</u>	<b>Conditions</b>
isophorone diisocyanate	3	Department of	-
		Industrial Works	
	No known specific nationa	l and/or regional regulations a	pplicable to this product
	(including its ingredients).		

## Section 16. Other information

<u>History</u>			
Date of printing	÷	12.09.2023	
Date of issue/Date of revision	1	12.09.2023	
Date of previous issue	1	28.03.2022	
Version	÷	1	
Key to abbreviations	:	ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)	
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### Section 16. Other information

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations

LogPow = logarithm of the octanol/water partition coefficient

#### References

Indicates information that has changed from previously issued version.

: Not available.

#### 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.