

Section 1. Identification		
GHS product identifier	: Gardex EcoGloss	
Other means of identification	: Not available.	
Product code	: 19540	
Product description	: Waterborne paint.	
Product type	: Liquid.	
Relevant identified uses o	f the substance or mixture and uses advised against	
	Identified uses	
Use in coatings - Consume	r use: Apply this product only as specified on the label.	
Supplier's details	: Jotun (Singapore) Pte Ltd 37 Tuas View Crescent Singapore 637236 Phone: 6508 8288 Fax: 6265 7484 SDSJotun@jotun.com	
Emergency telephone number	: Jotun (Singapore) Pte Ltd, Tel: 6508 8288	

JOTUN

Jotun Protects Property

Section 2. Hazards identification

Classification of the substance or mixture	: Not classified.
GHS label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	
General	: Keep out of reach of children.
Prevention	: Not applicable.
Response	: Not applicable.
Storage	: Not applicable.
Disposal	: Not applicable.

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

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture		
Other means of identification	: Not available.		
CAS number/other ident	<u>ifiers</u>		
CAS number	: Not applicable.		
EC number	: Mixture.		
Product code	: 19540		
Ingredient name		%	CAS number
3-iodo-2-propynyl butylca	rbamate (IPBC)	<0.1	55406-53-6

Date of issue

: 27.08.2019

Section 3. Composition/information on ingredients

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.

Chemical formula :

: Not applicable.

Section 4. First aid measures

Description of necessary fi	st 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. Get medical attention if symptoms occur.
Skin contact	: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if symptoms occur.
Most important symptoms/	ffects, acute and delayed
Potential acute health effe	<u>its</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.
Over-exposure signs/sym	<u>toms</u>
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: No specific data.
Ingestion	: No specific data.
Indication of immediate me	lical 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.
See toxicological information	n (Section 11)
Section E Eirofia	

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	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide 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.
Date of issue	: 27.08.2019 2/8

Section 6. Accidental release measures

Personal precautions, protec	tiv	e 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. 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".
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	<u>ita</u>	inment and cleaning up
Small spill	:	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	:	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). 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).	
Advice on general occupational hygiene	Eating, drinking and smoking should be prohibited in areas where this material i 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.	S
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 incompatile materials (see Section 10) and food and drink. Keep container tightly closed an 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 contair Use appropriate containment to avoid environmental contamination. See Section for incompatible materials before handling or use.	ble id ners.

Section 8. Exposure controls/personal protection

Control parameters Occupational exposure limits None. Appropriate engineering : Good general ventilation should be sufficient to control worker exposure to airborne controls contaminants. **Environmental exposure** Emissions from ventilation or work process equipment should be checked to ensure ÷ they comply with the requirements of environmental protection legislation. In some controls 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.

Section 8. Exposure controls/personal protection

=	
Eye/face protection	: Safety eyewear complying to EN 166 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. Wear suitable gloves tested to EN374. Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber, neoprene, PVC May be used, gloves(breakthrough time) 4 - 8 hours: 4H
	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

Appearance	
Physical state	: Liquid.
Colour	: Various
Odour	: Characteristic.
Odour threshold	: Not available.
рН	Not available.
Melting point	: 0
Boiling point	: Lowest known value: 100°C (212°F) (water). Weighted average: 111.19°C (232.1°F)
Flash point	: Not available.
Burning time	: Not applicable.
Burning rate	: Not applicable.
Evaporation rate	: Highest known value: 0.36 (water) Weighted average: 0.33compared with butyl acetate
Flammability (solid, gas)	: Not applicable.
Lower and upper explosive (flammable) limits	: 0.6 - 12.6%
Vapour pressure	 Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted average: 2.85 kPa (21.38 mm Hg) (at 20°C)

Date	of	iss	ue
Date	UI.	133	ue

Section 9. Physical and chemical properties

Vapour density	:	Highest known value: 7.5 (Air = 1) (propanoic acid, 2-methyl-, monoester with 2,2, 4-trimethyl-1,3-pentanediol). Weighted average: 3.51 (Air = 1)
Relative density	1	1.04 to 1.24 g/cm ³
Solubility	1	Easily soluble in the following materials: cold water and hot water.
Solubility in water	1	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Not applicable.
Decomposition temperature	1	Not available.
SADT	1	Not available.
Viscosity	:	Dynamic: Highest known value: 43.43 cP (propylene glycol) Weighted average: 37. 74 cP Kinematic (40C): >20.5 cSt

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 the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.	
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.	
SADT	: Not available.	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
3-iodo-2-propynyl butylcarbamate (IPBC)	LD50 Oral	Rat	1470 mg/kg	-

Irritation/Corrosion

Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
3-iodo-2-propynyl butylcarbamate (IPBC)	skin	Mammal - species unspecified	Sensitising

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Date of issue

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Section 11. Toxicological information				
Name	Category	Route of exposure	Target organs	
3-iodo-2-propynyl butylcarbamate (IPBC)	Category 1	Not determined	trachea	
Aspiration hazard				

Not available.

Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	:	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.
Symptoms related to the phy	sic	cal, chemical and toxicological characteristics
Eye contact	1	No specific data.
Inhalation	4	No specific data.
Skin contact	1	No specific data.
Ingestion	1	No specific data.
Delayed and immediate effec	ts	as well as chronic effects from short and long-term exposure
<u>Short term exposure</u>		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
General	:	No known significant effects or critical hazards.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	1	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 management of favial		

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
3-iodo-2-propynyl butylcarbamate (IPBC)	Acute EC50 0.022 mg/l Acute EC50 0.16 mg/l Acute LC50 0.067 mg/l Chronic NOEC 70 ppb Fresh water	Algae - Scenedesmus subspicatus Crustaceans - Daphnia magna Fish - Oncorhynchus mykiss Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	72 hours 48 hours 96 hours 96 hours

Persistence/degradability

Not available.

Mobility in soil

Soil/water partition coefficient (Koc)	:	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 nonrecyclable 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

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.
Additional information	-	-	-

This preparation is not classified as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).

Additional information		
ADR / RID	:	
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.
Transport in bulk according to Annex II of Marpol and the IBC Code	:	Not available.

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

Section 16. Other information

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) UN = United Nations
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.