



Section 1. Identification

GHS product identifier : Majestic Optima (C)

Product code : 8422

Other means of identification

: Not available.

Product type : Liquid.

Product description : Waterborne paint.

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

Use in coatings - Consumer use: Apply this product only as specified on the label.

Use in coatings - Professional use

Supplier's details : 佐敦涂料(张家港)有限公司

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Section 2. Hazards identification

Classification of the substance or mixture

: AQUATIC TOXICITY (ACUTE) - Category 3

GHS label elements

Signal word : No signal word.

Hazard statements : H402 - Harmful to aquatic life.

Precautionary statements

General : P102 - Keep out of reach of children.

Prevention : P273 - Avoid release to the environment.

Response : Not applicable.
Storage : Not applicable.

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Section 2. Hazards identification

Disposal

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

Other hazards which do not : None known.

result in classification

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of

: Not available.

identification

Product name	% (w/w)	CAS number	Type
propanoic acid, 2-methyl-, 2,2-dimethyl-1- (1-methylethyl)-1,3-propanediyl ester	<3	6846-50-0	[1]
amines, rosin	<0.1	61790-47-4	[1]
3-iodo-2-propynyl butylcarbamate (IPBC)	≤0.083	55406-53-6	[1]
C(M)IT/MIT (3:1)	≤0.0021	55965-84-9	[1]
→ I b th	0/ //	OAC P 777	भूद ग्रांग
产品名称	% (w/w)	CAS号码	类型
1-异丙基-2, 2-二甲基三环丙基二异丁酸酯	% (w/w)	6846-50-0	类型 [1]
	` '	* * *	
1-异丙基-2, 2-二甲基三环丙基二异丁酸酯	<3	6846-50-0	[1]

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.

Type

[1] Substance classified with a health or environmental hazard

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

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion

: 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.

Most important symptoms/effects, acute and delayed

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.

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Section 4. First aid measures

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : 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)

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. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide

carbon monoxide nitrogen oxides 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, protective equipment and emergency procedures

: 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.

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.

Methods and material for containment 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.

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Section 6. Accidental release measures

: Stop leak if without risk. Move containers from spill area. Approach the release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilt product. 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. Avoid breathing vapour or mist. Avoid release to the environment. 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.

including any incompatibilities

Conditions for safe storage, : 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Biological exposure indices

No exposure indices known.

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

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.

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.

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Section 8. Exposure controls/personal protection

Wear suitable gloves tested to ISO 374-1:2016.

Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber (> 0.4 mm), PVC (> 0.5 mm)

May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA) (> 0.3 mm), neoprene (> 0.35 mm), 4H/Silver Shield® (> 0.07 mm)

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.

Eye 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.

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.

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 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 : Liquid.
Colour : Various
Odour : Characteristic.
Odour threshold : Not available.

pH : 8 to 9 Melting point/freezing point : 0

Boiling point, initial boiling point, and boiling range

: Not available.

Flash point

Closed cup Open cup °F °C °F °C Method Method Ingredient name 78 2-(2-butoxyethoxy)ethanol 172.4 179.8 EU A.9 2-amino-2-methylpropanol 82.1 99 propylene glycol 210.2 benzoic acid, sodium salt >100 >212 propanoic acid, 2-methyl-, 136 276.8 **ASTM 3278** 2,2-dimethyl-1-(1-methylethyl) -1,3-propanediyl ester 137 278.6 EU A.9 184.85 364.7 polypropylene glycol 4000

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Section 9. Physical and chemical properties and safety characteristics

propylidynetrimethanol	172	341.6			
Distillates (petroleum), hydrotreated heavy paraffinic	>175	>347	98 to 344	208.4 to 651.2	EN ISO 2719

Flammability : Not available. Lower and upper explosion

: 2.6 - 12.6%

limit/flammability limit

Vapour pressure

	Vap	Vapour Pressure at 20°C		Va	oour pressu	re at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
water	17.5	2.3				
2-amino-2-methylpropanol	0.34	0.045	ASTM E 1194			
propylene glycol	0.15	0.02	EU A.4			
Distillates (petroleum), hydrotreated heavy paraffinic	<0.08	<0.011	ASTM D 5191			
2-(2-butoxyethoxy)ethanol	0.022	0.0029				
propanoic acid, 2-methyl-, 2,2-dimethyl-1-(1-methylethyl) -1,3-propanediyl ester	<0.011	<0.0015	EU A.4			
Alcohols, C16-18 and C18-unsatd., ethoxylated	0.005	0.00067				
zinc pyrithione	<0.00000008	<0.000000011	OECD 104			
butanamide, 2-[(2-methoxy- 4-nitrophenyl)azo]-n- (2-methoxyphenyl)-3-oxo-	0	0				
sodium nitrite	0	0				
propylidynetrimethanol	0	0				
polypropylene glycol 4000	0	0	OECD 104			

Relative vapour density : Not available. **Density** : 1.22 g/cm³

Solubility(ies)

Media	Result
cold water hot water	Easily soluble Easily soluble

Partition coefficient: n-

octanol/water

: Not applicable.

Auto-ignition temperature

Ingredient name	°C	°F	Method
butanamide, 2-[(2-methoxy-4-nitrophenyl)azo]-n- (2-methoxyphenyl)-3-oxo-	180	356	VDI 2263
2-(2-butoxyethoxy)ethanol	210	410	DIN 51794
polypropylene glycol 4000	305	581	EU A.15
propylene glycol	371	699.8	
cellulose, 2-hydroxyethyl ether	380	716	
2-amino-2-methylpropanol	438	820.4	ASTM D 2161
benzoic acid, sodium salt	>500	>932	

Decomposition temperature : Not available.

: Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt) **Viscosity**

Particle characteristics

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Section 9. Physical and chemical properties and safety characteristics

Median particle size : Not applicable.

Section 10. Stability and reactivity

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.

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	-
C(M)IT/MIT (3:1)	LD50 Oral	Rat	53 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
amines, rosin	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-
3-iodo-2-propynyl butylcarbamate (IPBC)	Eyes - Irritant	Mammal - species unspecified	-	-	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
3-iodo-2-propynyl butylcarbamate (IPBC)	skin	Mammal - species unspecified	Sensitising
C(M)IT/MIT (3:1)	skin	Mammal - species unspecified	Sensitising

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

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Section 11. Toxicological information

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	3.5	Route of exposure	Target organs
3-iodo-2-propynyl butylcarbamate (IPBC)	Category 1	-	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: 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

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

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

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General: No known significant effects or critical hazards.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.

Numerical measures of toxicity

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)
amines, rosin	500	N/A	N/A	N/A	N/A
3-iodo-2-propynyl butylcarbamate (IPBC)	500	N/A	N/A	N/A	0.5
C(M)IT/MIT (3:1)	53	50	N/A	0.5	N/A

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Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
3-iodo-2-propynyl butylcarbamate (IPBC)	Acute EC50 0.022 mg/l	Algae - Scenedesmus subspicatus	72 hours
	Acute EC50 0.16 mg/l	Crustaceans - Daphnia magna	48 hours
	Acute LC50 0.067 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 70 ppb Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
C(M)IT/MIT (3:1)	Acute EC50 0.048 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 0.0052 mg/l	Algae - Skeletonema costatum	48 hours
	Acute EC50 0.1 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.22 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Acute NOEC 0.00064 mg/l	Algae - Skeletonema costatum	48 hours
	Chronic NOEC 0.0012 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 0.004 mg/l	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.098 mg/l	Fish - Oncorhynchus mykiss	28 days

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
3-iodo-2-propynyl butylcarbamate (IPBC)	-	-	Readily
C(M)IT/MIT (3:1)	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
propanoic acid, 2-methyl-, 2,2-dimethyl-1- (1-methylethyl) -1,3-propanediyl ester	-	5340	high
C(M)IT/MIT (3:1)	-	3.16	low

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 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.

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Section 14. Transport information

	UN	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Environmental hazards	No.	No.	No.

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 : Not available.

to IMO instruments

Section 15. Regulatory information

TCCSCA List of toxic chemicals

Not applicable.

TCCSCA List of concerned chemicals

Not applicable.

Priority management chemicals, Article 2

Chemical substances possessing physical hazards or health hazards (Article 2.2 (II))

Ingredient name	Name on list	Concentration
1,2-benzisothiazol-3(2h)-one (BIT)	3-iodo-2-propynyl butylcarbamate 1,2-benzisothiazole-3-one sodium nitrite	≤0.1 ≤0.1 ≤0.1

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.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

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Section 16. Other information

Procedure used to derive the classification

Classification	Justification
AQUATIC TOXICITY (ACUTE) - Category 3	Calculation method

References : Not available.

Organisation that prepared : Jotun AS, Norway +47 33 45 70 00

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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 = Intermediate Bulk Container

IMDG = 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

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.

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