



#### Section 1. Identification

GHS product identifier : SteelMaster 1200WF

Product code : 25780

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 - Industrial use
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 : CARCINOGENICITY - Category 2 REPRODUCTIVE TOXICITY - Category 2

**GHS label elements** 

Hazard pictograms :



Signal word : Warning.

**Hazard statements** : H351 - Suspected of causing cancer.

H361 - Suspected of damaging fertility or the unborn child.

**Precautionary statements** 

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## Section 2. Hazards identification

: P201 - Obtain special instructions before use.

P280 - Wear protective gloves, protective clothing and eye or face protection.

: P308 + P313 - IF exposed or concerned: Get medical advice or attention. Response

**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 : 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
melamine	<10	108-78-1	[1]
C(M)IT/MIT (3:1)	<0.0025	55965-84-9	[1]
产品名称	% (w/w)	CAS号码	类型
三聚氰胺	<10	108-78-1	[1]
5-氯-2-甲基-1-异噻唑啉-3-酮和 2-甲基-1-异 噻唑啉-3-酮的混合物	<0.0025	55965-84-9	[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. Continue to rinse for at least 10 minutes. Get medical attention.

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. 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** 

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. 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. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open

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### Section 4. First aid measures

airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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

#### Potential acute health effects

Eye contact
 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/symptoms

Eye contact : No specific data.

**Inhalation** : Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact**: Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

**Ingestion**: Adverse symptoms may include the following:

reduced foetal weight increase in foetal deaths skeletal malformations

#### 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. 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

: 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 nitrogen oxides phosphorus 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.

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### 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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).

#### 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.

#### Large spill

: 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). Avoid exposure obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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. Store locked up. 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.

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# Section 8. Exposure controls/personal protection

# 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.

#### 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.

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

Recommended, gloves(breakthrough time) > 8 hours: nitrile rubber (> 0.4 mm), neoprene (> 0.35 mm), PVC (> 0.5 mm)

May be used, gloves(breakthrough time) 4 - 8 hours: 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 : White.

Odour : Characteristic.
Odour threshold : Not available.

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# Section 9. Physical and chemical properties and safety characteristics

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

**Boiling point, initial boiling** point, and boiling range

: Not available.

Flash point

		Closed cup			Open cup		
Ingredient name	°C	°F	Method	°C	°F	Method	
propan-2-ol	11.7	53.1		11.85	53.3		
formic acid	49.5	121.1	DIN EN ISO 13736				
2-amino-2-methylpropanol	82.1	179.8	EU A.9				
propylene glycol	99	210.2					
glyoxal	>100	>212					
propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl- 1,3-pentanediol	122	251.6	ASTM 3278	120	248		
propylidynetrimethanol	172	341.6					
ammability	: Not a	vailable.	•	•	•		

**Flammability Lower and upper explosion** : 2.6 - 12.6% limit/flammability limit

**Vapour pressure** 

	Vapour Pressure at 20°C		re at 20°C	Va	pour pressu	re at 50°C
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
melamine	3525000	469961.4				
propan-2-ol	33	4.4				
formic acid	32.04	4.3	EU A.4			
water	17.5	2.3				
glyoxal	15.15	2	EU A.4			
2-amino-2-methylpropanol	0.34	0.045	ASTM E 1194			
propylene glycol	0.15	0.02	EU A.4			
propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl- 1,3-pentanediol	0.0098	0.0013	EU A.4			
propanol, oxybis-, dibenzoate	0.0000012	0.00000016	EU A.4	0.000011	0.0000015	EU A.4
pentaerythritol	0.000000026	0.000000035				
polyphosphoric acids, ammonium salts	0	0				
1,3-propanediol, 2,2'-[oxybis (methylene)]bis[2-(hydroxymethyl)-	0	0				
propylidynetrimethanol	0	0				

Relative vapour density : Not available. : 1.409 g/cm<sup>3</sup> **Density** 

Solubility(ies)

Media	Result
cold water hot water	Easily soluble Easily soluble

Partition coefficient: noctanol/water

: Not applicable.

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# Section 9. Physical and chemical properties and safety characteristics

**Auto-ignition temperature** 

Ingredient name	°C	°F	Method
glyoxal	285	545	DIN 51794
propylene glycol	371	699.8	
propanoic acid, 2-methyl-, monoester with 2,2,4-trimethyl-1,3-pentanediol	393	739.4	
formic acid	434	813.2	
2-amino-2-methylpropanol	438	820.4	ASTM D 2161
melamine	>400	>752	EU A.16
pentaerythritol	>400	>752	EU A.16
propanol, oxybis-, dibenzoate	>400	>752	EU A.15
1,3-propanediol, 2,2'-[oxybis(methylene)]bis[2-(hydroxymethyl)-	>400	>752	EU A.16
propan-2-ol	456	852.8	

**Decomposition temperature**: Not available.

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

**Particle 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
melamine C(M)IT/MIT (3:1)	LD50 Oral LD50 Oral		3161 mg/kg 53 mg/kg	-

#### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
melamine	Eyes - Mild irritant	Rabbit		24 hours 500 milligrams	-

#### **Sensitisation**

3	Route of exposure	Species	Result
C(M)IT/MIT (3:1)	skin	Mammal - species unspecified	Sensitising

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# Section 11. Toxicological information

#### Mutagenicity

Not available.

#### **Carcinogenicity**

Not available.

#### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
melamine	-	Positive	-		Oral: 89 mg/kg	days

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name		Route of exposure	Target organs
melamine	Category 2	-	urinary tract

#### **Aspiration hazard**

Not available.

Information on likely routes : Not available.

of exposure

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. : No known significant effects or critical hazards. **Skin contact** Ingestion : No known significant effects or critical hazards.

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

**Eye contact** : No specific data.

Inhalation : Adverse symptoms may include the following:

> reduced foetal weight increase in foetal deaths skeletal malformations

**Skin contact** : Adverse symptoms may include the following:

> reduced foetal weight increase in foetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

> reduced foetal weight increase in foetal deaths skeletal malformations

#### 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** 

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# Section 11. Toxicological information

**Potential immediate** 

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : No known significant effects or critical hazards.

**Carcinogenicity** : Suspected of causing cancer. Risk of cancer depends on duration and level of

exposure.

Mutagenicity : No known significant effects or critical hazards.Reproductive toxicity : Suspected of damaging fertility or the unborn child.

#### **Numerical measures of toxicity**

#### **Acute toxicity estimates**

Product/ingredient name	Oral (mg/ kg)		(gases)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
C(M)IT/MIT (3:1)	53	50	N/A	0.5	N/A

# **Section 12. Ecological information**

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
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 Chronic NOEC 0.098 mg/l	Daphnia - Daphnia magna Fish - Oncorhynchus mykiss	21 days 28 days

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
C(M)IT/MIT (3:1)	-	-	Not readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
melamine	-1.22	<3.8	low
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.

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# 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	IATA
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.

Transport in bulk according: Not available. to IMO instruments

# Section 15. Regulatory information **TCCSCA List of toxic chemicals**

Listed no.	Series no.	Ingredient name	RQ	Class 1	Class 2	Class 3	Class 4
185	1	melamine	-	-	-	-	Listed

#### **TCCSCA List of concerned chemicals**

Not applicable.

**OSHA Enforcement Rules** Article 28

: This product contains substances "Specially hazardous to health": propan-2-ol.

#### Priority management chemicals, Article 2

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

Ingredient name	Name on list	Concentration
propan-2-ol	isopropyl alcohol	≤1
1,2-benzisothiazol-3(2h)-one (BIT)	1,2-benzisothiazole-3-one	≤0.1
2-methyl-2H-isothiazol-3-one (MIT)	2-methyl-4-isothiazolin-3-one	≤0.1

#### **International regulations**

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# Section 15. Regulatory information

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.

#### Section 16. Other information

#### Procedure used to derive the classification

Classification	Justification
]	Calculation method 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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