

# Material Safety Data Sheet



## Jotatemp 650

### 1. Product and company identification

Trade name : Jotatemp 650  
Code : 9240  
Material uses : Coatings: Paint  
Manufacturer : Jotun Paints, Inc.  
9203 Highway 23  
Belle Chasse, LA 70037  
Telephone: (800) 229-3538 or  
(504) 394-3538  
SDSJotun@jotun.com

In case of emergency : 1-800-424-9300

### 2. Hazards identification

Physical state : Liquid.  
Odor : Aromatic.  
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
WARNING!  
FLAMMABLE LIQUID AND VAPOR. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.  
Flammable liquid. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Avoid contact with skin and clothing. Contains material that may cause target organ damage, based on animal data. Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.  
Eyes : May cause eye irritation.  
Skin : May cause skin irritation.  
Inhalation : No known significant effects or critical hazards.  
Ingestion : No known significant effects or critical hazards.  
Potential chronic health effects : **CARCINOGENIC EFFECTS:** Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [xylene]. Classified A3 (Proven for animals.) by ACGIH, 2B (Possible for humans.) by IARC [ethylbenzene]. Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [Toluene].  
**MUTAGENIC EFFECTS:** Not available.  
**TERATOGENIC EFFECTS:** Not available.  
Medical conditions aggravated by over-exposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

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### 3. Composition/information on ingredients

Name	CAS number	% by weight
xylene	1330-20-7	2.5 - 10
ethylbenzene	100-41-4	1 - 2.5
Toluene	108-88-3	0 - 1

Components not listed are not physical or health hazards as defined in 29 CFR 1910.1200 (Hazard Communication Standard).

### 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- 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.

### 5. Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide
- Suitable** : Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.  
  
Flammable liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.
- 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.

### 6. Accidental release measures

- Personal precautions** : 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 spilled material. Shut off all ignition sources. No flames, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilled 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).

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## 6 . Accidental release measures

**Methods for cleaning up** : Stop leak if without risk. Move containers from spill area. Approach 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). Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7 . Handling and storage

**Handling** : Put on appropriate personal protective equipment (see Section 8). 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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Storage** : Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

## 8 . Exposure controls/personal protection

### Product name

xylene

### Exposure limits

#### **ACGIH TLV (United States, 1/2011).**

STEL: 651 mg/m<sup>3</sup> 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 434 mg/m<sup>3</sup> 8 hour(s).

TWA: 100 ppm 8 hour(s).

#### **OSHA PEL (United States, 6/2010).**

TWA: 435 mg/m<sup>3</sup> 8 hour(s).

TWA: 100 ppm 8 hour(s).

#### **OSHA PEL 1989 (United States, 3/1989).**

STEL: 655 mg/m<sup>3</sup> 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 435 mg/m<sup>3</sup> 8 hour(s).

TWA: 100 ppm 8 hour(s).

ethylbenzene

#### **OSHA PEL 1989 (United States, 3/1989).**

TWA: 100 ppm 8 hour(s).

TWA: 435 mg/m<sup>3</sup> 8 hour(s).

STEL: 125 ppm 15 minute(s).

STEL: 545 mg/m<sup>3</sup> 15 minute(s).

#### **NIOSH REL (United States, 6/2009).**

TWA: 100 ppm 10 hour(s).

## 8 . Exposure controls/personal protection

TWA: 435 mg/m<sup>3</sup> 10 hour(s).  
 STEL: 125 ppm 15 minute(s).  
 STEL: 545 mg/m<sup>3</sup> 15 minute(s).  
**OSHA PEL (United States, 6/2010).**

TWA: 100 ppm 8 hour(s).  
 TWA: 435 mg/m<sup>3</sup> 8 hour(s).  
**ACGIH TLV (United States, 1/2011). Notes: K**  
 TWA: 20 ppm 8 hour(s). Form:

Toluene

**OSHA PEL 1989 (United States, 3/1989).**  
 TWA: 100 ppm 8 hour(s).  
 TWA: 375 mg/m<sup>3</sup> 8 hour(s).  
 STEL: 150 ppm 15 minute(s).  
 STEL: 560 mg/m<sup>3</sup> 15 minute(s).  
**OSHA PEL Z2 (United States, 11/2006).**

TWA: 200 ppm 8 hour(s).  
 CEIL: 300 ppm  
 AMP: 500 ppm 10 minute(s).  
**NIOSH REL (United States, 6/2009).**  
 TWA: 100 ppm 10 hour(s).  
 TWA: 375 mg/m<sup>3</sup> 10 hour(s).  
 STEL: 150 ppm 15 minute(s).  
 STEL: 560 mg/m<sup>3</sup> 15 minute(s).  
**ACGIH TLV (United States, 1/2011).**  
 TWA: 20 ppm 8 hour(s).

- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : 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.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : 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.
- 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.

## 9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : Closed cup: 7°C (44,6°F)
- Auto-ignition temperature** : 393 to 530°C (739,4 to 986°F)
- Flammable limits** : Lower: 1,2%  
Upper: 8%
- Color** : Gray. Black.
- Odor** : Aromatic.

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## 9 . Physical and chemical properties

Boiling/condensation point	: >90°C (>194°F)	
Relative density	: 1.88 g/cm <sup>3</sup>	15.69 pounds/gallon
VOC	: 3.5 pounds/gallon (US)	22,3 % (w/w) [ISO 11890-1]
Solubility	: Insoluble in the following materials: cold water and hot water.	

## 10 . Stability and reactivity

Stability and reactivity	: The product is stable.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Hazardous polymerization	: Under normal conditions of storage and use, hazardous polymerization will not occur.

## 11 . Toxicological information

Chronic effects on humans	: <b>CARCINOGENIC EFFECTS:</b> Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [xylene]. Classified A3 (Proven for animals.) by ACGIH, 2B (Possible for humans.) by IARC [ethylbenzene]. Classified A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC [Toluene]. Contains material which may cause damage to the following organs: kidneys, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
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Other toxic effects on humans	: Exposure to component solvent vapor concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Swallowing may cause nausea, diarrhea, vomiting, gastrointestinal irritation and chemical pneumonia. Aspiration hazard if swallowed. Can enter lungs and cause damage.
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### Specific effects

Carcinogenic effects	: Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.
Mutagenic effects	: No known significant effects or critical hazards.
Reproduction toxicity	: No known significant effects or critical hazards.
Chronic effects	: Contains material that may cause target organ damage, based on animal data.
Target organs	: Contains material which may cause damage to the following organs: kidneys, the reproductive system, liver, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

## 12 . Ecological information

### Ecotoxicity data

<u>Product/ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
xylene	Oncorhynchus mykiss (LC50)	96 hour(s)	3.3 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	8.2 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	8.6 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	12 mg/l
	Lepomis macrochirus (LC50)	96 hour(s)	13.3 mg/l
	Pimephales promelas (LC50)	96 hour(s)	13.4 mg/l
ethylbenzene	Daphnia magna (EC50)	48 hour(s)	2.93 mg/l
	Daphnia magna (EC50)	48 hour(s)	2.97 mg/l

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## 12 . Ecological information

	Selenastrum capricornutum (EC50)	48 hour(s)	7.2 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	4.2 mg/l
	Pimephales promelas (LC50)	96 hour(s)	9.09 mg/l
	Poecilia reticulata (LC50)	96 hour(s)	9.6 mg/l
Toluene	Daphnia magna (EC50)	48 hour(s)	6 mg/l
	Daphnia magna (EC50)	48 hour(s)	6.56 mg/l
	Oncorhynchus mykiss (EC50)	48 hour(s)	6.78 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	5.8 mg/l
	Oncorhynchus mykiss (LC50)	96 hour(s)	6.78 mg/l
	Pimephales promelas (LC50)	96 hour(s)	12.6 mg/l

Environmental precautions : No known significant effects or critical hazards.

Products of degradation : Products of degradation: carbon oxides (CO, CO<sub>2</sub>) and water.

## 13 . Disposal considerations



**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.




Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	1263	Paint	3	III		-
TDG Classification	1263	Paint	3	III		-

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## 14 . Transport information

ADR/RID Class	1263	Paint	3	III		Tunnel restriction code: (D/E) Hazard identification number: 33
						Special provisions: 640D
IMDG Class	1263	Paint	3	III		Emergency schedules (EmS): F-E, S-E Marine pollutant: No.
IATA-DGR Class	1263	Paint	3	III		-

PG\* : Packing group

## 15 . Regulatory information

HCS Classification : Flammable liquid  
Carcinogen  
Target organ effects

U.S. Federal regulations : TSCA 8(a) IUR Exempt/Partial exemption: Not determined  
United States inventory (TSCA 8b): All components are listed or exempted.  
SARA 302/304/311/312 extremely hazardous substances: No products were found.  
SARA 302/304 emergency planning and notification: No products were found.  
SARA 302/304/311/312 hazardous chemicals: xylene; ethylbenzene; Toluene; dimethyl carbonate  
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:  
xylene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
Toluene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard;  
dimethyl carbonate: Fire hazard  
Clean Water Act (CWA) 307: Toluene  
Clean Water Act (CWA) 311: Toluene  
Clean Air Act (CAA) 112 accidental release prevention: No products were found.

### SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	xylene	1330-20-7	2.5 - 10
	ethylbenzene	100-41-4	1 - 2.5
	Toluene	108-88-3	0 - 1
Supplier notification	xylene	1330-20-7	2.5 - 10
	ethylbenzene	100-41-4	1 - 2.5
	Toluene	108-88-3	0 - 1

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations : Connecticut Carcinogen Reporting: None of the components are listed.  
Connecticut Hazardous Material Survey: None of the components are listed.  
Florida substances: None of the components are listed.  
Illinois Chemical Safety Act: None of the components are listed.  
Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.  
Louisiana Reporting: None of the components are listed.

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## 15 . Regulatory information

**Louisiana Spill:** None of the components are listed.

**Massachusetts Spill:** None of the components are listed.

**Massachusetts Substances:** The following components are listed: XYLENE; METHYL CARBONATE; ethylbenzene; TOLUENE

**Michigan Critical Material:** None of the components are listed.

**Minnesota Hazardous Substances:** None of the components are listed.

**New Jersey Hazardous Substances:** The following components are listed: XYLENES; BENZENE, DIMETHYL-; DIMETHYL CARBONATE; CARBONIC ACID, DIMETHYL ESTER; ethylbenzene; TOLUENE; BENZENE, METHYL-

**New Jersey Spill:** None of the components are listed.

**New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.

**New York Acutely Hazardous Substances:** The following components are listed: Xylene (mixed); Ethylbenzene; Toluene

**New York Toxic Chemical Release Reporting:** None of the components are listed.

**Pennsylvania RTK Hazardous Substances:** The following components are listed: BENZENE, DIMETHYL-; CARBONIC ACID, DIMETHYL ESTER; ethylbenzene; BENZENE, METHYL-

**Rhode Island Hazardous Substances:** None of the components are listed.

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

<u>Ingredient name</u>	<u>Cancer</u>	<u>Reproductive</u>	<u>No significant risk level</u>	<u>Maximum acceptable dosage level</u>
ethylbenzene	Yes.	No.	No.	No.
Toluene	No.	Yes.	No.	7000 µg/day (ingestion)

### EU regulations

Hazard symbol or symbols :  

Highly flammable

Harmful

**Risk phrases** : ☒ R11- Highly flammable.  
R65- Harmful: may cause lung damage if swallowed.

**Safety phrases** : S23- Do not breathe vapor / spray.  
S38- In case of insufficient ventilation, wear suitable respiratory equipment.

## 16 . Other information

**Label requirements** : FLAMMABLE LIQUID AND VAPOR. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.

**Hazardous Material Information System (U.S.A.)** :

Health	2
Flammability	3
Physical hazards	0
PERSONAL PROTECTION	X

**National Fire Protection Association (U.S.A.)** :



**Date of issue** : 06.03.2013.

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## **16 . Other information**

Version : 2.03

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

▣ Indicates information that has changed from previously issued version.