

Material Safety Data Sheet



Pioner Topcoat AV

1. Product and company identification

Trade name : Pioner Topcoat AV
Code : MM00001117
Material uses : Coatings: Solvent-borne.
Manufacturer : Jotun Paints, Inc.
9203 Highway 23
Belle Chasse, LA 70037
Telephone: (800) 229-3538 or
(504) 394-3538
SDSJotun@jotun.no
In case of emergency : 1-800-424-9300

2. Hazards identification

Physical state : Liquid.
Odor : Characteristic.
OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Emergency overview : CAUTION!
FLAMMABLE LIQUID AND VAPOR. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.
Flammable liquid. May be harmful if absorbed through skin. Keep away from heat, sparks and flame. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not get in eyes. Avoid contact with skin and clothing. Contains material that can cause target organ damage. 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. Wash thoroughly after handling.

Potential acute health effects

Eyes : May cause eye irritation.
Skin : Harmful in contact with 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 A3 (Proven for animals.) by ACGIH, 2B (Possible for humans.) by IARC [ethylbenzene].
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)

3. Composition/information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>% by weight</u>
Solvent naphtha (petroleum), light aromatic	64742-95-6	25 - 50
xylene	1330-20-7	10 - 25
titanium dioxide	13463-67-7	2.5 - 10
ethylbenzene	100-41-4	2.5 - 10

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

Continued on next page

Section 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. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

5 . Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, 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.

Section 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 flares, 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).
- 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.

Section 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. 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

<u>Product name</u>	<u>Exposure limits</u>
Solvent naphtha (petroleum), light aromatic	<p>NIOSH REL (United States, 6/2001). TWA: 125 mg/m³ 10 hour(s). Form: All forms TWA: 25 ppm 10 hour(s). Form: All forms</p> <p>ACGIH TLV (United States, 1/2005). TWA: 123 mg/m³ 8 hour(s). Form: All forms TWA: 25 ppm 8 hour(s). Form: All forms</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 125 mg/m³ 8 hour(s). Form: All forms TWA: 25 ppm 8 hour(s). Form: All forms</p>
xylene	<p>ACGIH TLV (United States, 1/2007). STEL: 651 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 434 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).</p> <p>OSHA PEL (United States, 11/2006). TWA: 435 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). STEL: 655 mg/m³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 435 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).</p>
titanium dioxide	<p>OSHA PEL (United States, 11/2006). TWA: 15 mg/m³ 8 hour(s). Form: Total dust</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 10 mg/m³ 8 hour(s). Form: Total dust</p> <p>ACGIH TLV (United States, 1/2007). TWA: 10 mg/m³ 8 hour(s).</p>
ethylbenzene	<p>ACGIH TLV (United States, 1/2005). Notes: 2002 Adoption. Substances for which there is a Biological Exposure Index or Indices STEL: 125 ppm 15 minute(s). Form: All forms TWA: 100 ppm 8 hour(s). Form: All forms</p> <p>NIOSH REL (United States, 12/2001). STEL: 545 mg/m³ 15 minute(s). Form: All forms STEL: 125 ppm 15 minute(s). Form: All forms TWA: 435 mg/m³ 10 hour(s). Form: All forms TWA: 100 ppm 10 hour(s). Form: All forms</p> <p>OSHA PEL (United States, 8/1997). TWA: 435 mg/m³ 8 hour(s). Form: All forms TWA: 100 ppm 8 hour(s). Form: All forms</p> <p>OSHA PEL 1989 (United States, 3/1989).</p>

8 . Exposure controls/personal protection

STEL: 545 mg/m³ 15 minute(s). Form: All forms
 STEL: 125 ppm 15 minute(s). Form: All forms
 TWA: 435 mg/m³ 8 hour(s). Form: All forms
 TWA: 100 ppm 8 hour(s). Form: All forms

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.

Personal protection

- 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: 27°C (80,6°F)
- Flammable limits** : Lower: 1%
Upper: <=13%
- Color** : Various colors.
- Odor** : Characteristic.
- Relative density** : 1.1 g/cm³ 9.18 pounds/gallon
- VOC** : 4.47 pounds/gallon (US) 536 (g/l).
- Solubility** : Insoluble in the following materials: cold water and hot water.

Section 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.

Section 11. Toxicological information

- Chronic effects on humans** : **CARCINOGENIC EFFECTS:** Classified A3 (Proven for animals.) by ACGIH, 2B (Possible for humans.) by IARC [ethylbenzene].
Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, gastrointestinal tract.
- Other toxic effects on humans** : Hazardous by the following route of exposure: of inhalation (lung irritant).
- 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 can cause target organ damage.
- Target organs** : Contains material which causes damage to the following organs: upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.
Contains material which may cause damage to the following organs: blood, kidneys, lungs, liver, gastrointestinal tract.

12 . Ecological information

Ecotoxicity data

<u>Product/ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
Solvent naphtha (petroleum), light aromatic	Fish (LC50)	96 hour(s)	<10 mg/l
	Daphnia (EC50)	48 hour(s)	<10 mg/l
	Algae (IC50)	72 hour(s)	<10 mg/l
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
	Daphnia magna (EC50)	48 hour(s)	>1000 mg/l
titanium dioxide ethylbenzene	Daphnia magna (EC50)	48 hour(s)	2.93 mg/l
	Daphnia magna (EC50)	48 hour(s)	2.97 mg/l
	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

- Environmental precautions** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Products of degradation** : Products of degradation: carbon oxides (CO, CO₂) and water. Some metallic oxides.

13 . Disposal considerations







- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. 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.

Section 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		-
ADR/RID Class	1263	Paint.	3	III		Tunnel restriction code: (D/E) Hazard identification number: 30 Special provisions: 640E
IMDG Class	1263	Paint.. Marine pollutant (Solvent naphtha (petroleum), light aromatic)	3	III	 	Emergency schedules (EmS): F-E, S-E Marine pollutant: Yes.
IATA-DGR Class	1263	Paint.	3	III		-

PG* : Packing group

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15 . Regulatory information

HCS Classification : Flammable liquid
Carcinogen
Target organ effects

U.S. Federal regulations : TSCA 8(a) PAIR: 2-methoxy-1-methylethyl acetate
United States inventory (TSCA 8b): Not determined.

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: ethylbenzene; xylene; limestone; titanium dioxide

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; xylene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; limestone: Immediate (acute) health hazard; titanium dioxide: Immediate (acute) health hazard

Clean Water Act (CWA) 307: copper, [29h,31h-phthalocyaninato(2-)-n29,n30,n31,n32]-, (sp-4-1)-; ethylbenzene

Clean Water Act (CWA) 311: ethylbenzene; xylene

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

Clean Air Act (CAA) 112 regulated flammable substances: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

SARA 313

	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
Form R - Reporting requirements	: xylene	1330-20-7	10 - 25
	: ethylbenzene	100-41-4	2.5 - 10
Supplier notification	: xylene	1330-20-7	10 - 25
	: ethylbenzene	100-41-4	2.5 - 10

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.

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15 . Regulatory information

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.
- Louisiana Spill:** None of the components are listed.
- Massachusetts Spill:** None of the components are listed.
- Massachusetts Substances:** The following components are listed: titanium dioxide; limestone; XYLENE; ethylbenzene
- 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: titanium dioxide; XYLENES; ethylbenzene
- 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)
- New York Toxic Chemical Release Reporting:** None of the components are listed.
- Pennsylvania RTK Hazardous Substances:** The following components are listed: titanium dioxide; limestone; BENZENE, DIMETHYL-; ethylbenzene
- 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.
diisodecyl phthalate	No.	Yes.	No.	No.
carbon black	Yes.	No.	No.	No.

EU regulations

Hazard symbol or symbols :



Harmful



Dangerous for the environment

Risk phrases :

- R10- Flammable.
- R20/21- Harmful by inhalation and in contact with skin.
- R37- Irritating to respiratory system.
- R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety phrases :

- S23- Do not breathe vapor / spray.
- S36/37- Wear suitable protective clothing and gloves.
- S38- In case of insufficient ventilation, wear suitable respiratory equipment.
- S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

16 . Other information

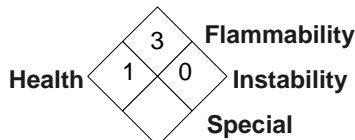
Label requirements :

FLAMMABLE LIQUID AND VAPOR. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. CONTAINS MATERIAL THAT CAN CAUSE TARGET ORGAN DAMAGE. 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	1
PERSONAL PROTECTION	C

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



16 . Other information

Date of issue : 07.10.2009.

Version : 2

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.