



# SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Date of issue: 10/30/2014

Version 1.0

## SECTION 1. Identification

### Product identifier

Product number	XX0060
Product name	Xylenes For Histology
CAS-No.	1330-20-7

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

Identified uses	Reagent for analysis
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### Details of the supplier of the safety data sheet

Company	EMD Millipore Corporation   290 Concord Road, Billerica, MA 01821, United States of America   General Inquiries: +1-978-715-4321   Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)
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Emergency telephone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week
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## SECTION 2. Hazards identification

### GHS Classification

Flammable liquid, Category 3, H226  
Acute toxicity, Category 4, Inhalation, H332  
Acute toxicity, Category 4, Dermal, H312  
Skin irritation, Category 2, H315

For the full text of the H-Statements mentioned in this Section, see Section 16.

### GHS-Labeling

#### Hazard pictograms



Signal Word  
Warning

#### Hazard Statements

H226 Flammable liquid and vapor.  
H312 + H332 Harmful in contact with skin or if inhaled.

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H315 Causes skin irritation.

### *Precautionary Statements*

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 Keep container tightly closed.  
P240 Ground/bond container and receiving equipment.  
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.  
P242 Use only non-sparking tools.  
P243 Take precautionary measures against static discharge.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.  
P322 Specific measures (see supplemental first aid instructions on this label).  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
P403 + P235 Store in a well-ventilated place. Keep cool.  
P501 Dispose of contents/ container to an approved waste disposal plant.

### **Other hazards**

None known.

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### **SECTION 3. Composition/information on ingredients**

Formula	$C_6H_4(CH_3)_2$	$C_8H_{10}$ (Hill)
Molar mass	106.17 g/mol	

### **Hazardous ingredients**

*Chemical Name ( Concentration)*

CAS-No.

*xylene (mixture of isomers) ( >= 90 % - <= 100 % )*

1330-20-7

Exact percentages are being withheld as a trade secret.

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### **SECTION 4. First aid measures**

#### **Description of first-aid measures**

##### *Inhalation*

After inhalation: fresh air. If breathing stops: mouth-to-mouth breathing or artificial respiration. Oxygen if necessary. Immediately call in physician.

##### *Skin contact*

After skin contact: wash off with plenty of water. Remove contaminated clothing. Get medical attention.

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### *Eye contact*

After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.

### *Ingestion*

If swallowed Caution Aspiration hazard Keep respiratory tract clear. Call a physician immediately. Subsequently administer: activated charcoal (20 - 40 g in 10% slurry). More severe effects if alcohol is consumed.

Never give anything by mouth to an unconscious person.

### **Most important symptoms and effects, both acute and delayed**

Dermatitis, Dizziness, narcosis, agitation, spasms, euphoria, Gastrointestinal disturbance, Headache, drowsiness

### **Indication of any immediate medical attention and special treatment needed**

No information available.

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## **SECTION 5. Fire-fighting measures**

### **Extinguishing media**

#### *Suitable extinguishing media*

Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

#### *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

### **Special hazards arising from the substance or mixture**

Combustible material, Vapors are heavier than air and may spread along floors.  
Development of hazardous combustion gases or vapors possible in the event of fire.  
Forms explosive mixtures with air at elevated temperatures.

### **Advice for firefighters**

#### *Special protective equipment for fire-fighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### *Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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## **SECTION 6. Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

### **Environmental precautions**

Do not empty into drains. Risk of explosion.

### **Methods and materials for containment and cleaning up**

Cover drains. Collect, bind, and pump off spills.  
Observe possible material restrictions (see sections 7 and 10).

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Take up with liquid-absorbent material (e.g. Chemisorb®). Dispose of properly. Clean up affected area.

## SECTION 7. Handling and storage

### Precautions for safe handling

*Advice on protection against fire and explosion*

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

### Conditions for safe storage, including any incompatibilities

Keep away from heat and sources of ignition. Keep container tightly closed in a dry and well-ventilated place.

Store at room temperature.

## SECTION 8. Exposure controls/personal protection

### Exposure limit(s)

*Ingredients*

Basis	Value	Threshold limits	Remarks
<i>xylene (mixture of isomers) 1330-20-7</i>			
ACGIH	Short Term Exposure Limit (STEL):	150 ppm	
	Time Weighted Average (TWA):	100 ppm	
NIOSH/GUIDE	Recommended exposure limit (REL):	100 ppm 435 mg/m <sup>3</sup>	
	Recommended exposure limit (REL):	100 ppm 435 mg/m <sup>3</sup>	
	Short Term Exposure Limit (STEL):	150 ppm 655 mg/m <sup>3</sup>	
	Short Term Exposure Limit (STEL):	150 ppm 655 mg/m <sup>3</sup>	
	Short Term Exposure Limit (STEL):	150 ppm 655 mg/m <sup>3</sup>	
	Recommended exposure limit (REL):	100 ppm 435 mg/m <sup>3</sup>	
OSHA_TRANS	PEL:	100 ppm 435 mg/m <sup>3</sup>	
Z1A	Short Term Exposure Limit (STEL):	150 ppm 655 mg/m <sup>3</sup>	
	Time Weighted Average (TWA):	100 ppm 435 mg/m <sup>3</sup>	

### Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

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### Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

#### *Hygiene measures*

Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

#### *Eye/face protection*

Tightly fitting safety goggles

#### *Hand protection*

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.

#### *Other protective equipment:*

Flame retardant antistatic protective clothing.

#### *Respiratory protection*

required when vapors/aerosols are generated.

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.

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### SECTION 9. Physical and chemical properties

Physical state	liquid
Color	colorless
Odor	aromatic
Odor Threshold	No information available.
pH	Not applicable
Melting point	> -34 °C
Boiling point/boiling range	279 - 289 °F ( 137 - 143 °C)
Flash point	77 °F ( 25 °C) Method: c.c.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Lower explosion limit	1.0 %(V)
Upper explosion limit	7.0 %(V)

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Vapor pressure	10 hPa at 68 °F ( 20 °C)
Relative vapor density	3.7
Density	0.86 g/cm <sup>3</sup> at 68 °F ( 20 °C)
Relative density	No information available.
Water solubility	0.2 g/l at 68 °F ( 20 °C)
Partition coefficient: n-octanol/water	log Pow: 3.12 (experimental) (Lit.) A remarkable bioaccumulation potential is expected (log Po/w >3).
Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	ca. 0.6 mPa.s at 68 °F ( 20 °C)
Explosive properties	No information available.
Oxidizing properties	No information available.
Ignition temperature	ca. 869 °F ( 465 °C) Method: DIN 51794

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### SECTION 10. Stability and reactivity

#### Reactivity

Vapor/air-mixtures are explosive at intense warming.

#### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

#### Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents, conc. sulfuric acid, sulfur

Risk of explosion with:

Nitric acid, uranium hexafluoride

#### Conditions to avoid

Heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

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### Incompatible materials

rubber, various plastics, Light metals

### Hazardous decomposition products

no information available

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## SECTION 11. Toxicological information

### Information on toxicological effects

#### *Likely route of exposure*

Inhalation, Eye contact, Skin contact

#### *Acute oral toxicity*

LD50 Rat: 5,251 mg/kg (ECHA)

Symptoms: Gastrointestinal disturbance, Risk of aspiration upon vomiting.

LD50 Rat: 5,251 - 5,627 mg/kg

#### *Acute inhalation toxicity*

absorption

Symptoms: Inhalation may lead to the formation of oedemas in the respiratory tract.

#### *Acute dermal toxicity*

absorption

#### *Skin irritation*

Rabbit

Result: Irritations

(IUCLID)

Causes skin irritation.

Drying-out effect resulting in rough and chapped skin.

#### *Genotoxicity in vitro*

Mutagenicity (mammal cell test): chromosome aberration.

Result: negative

(National Toxicology Program)

Mutagenicity (mammal cell test): micronucleus.

Result: negative

(IUCLID)

Ames test

Result: negative

(IUCLID)

#### *Carcinogenicity*

No indication of carcinogenic activity. (IUCLID)

#### *Specific target organ systemic toxicity - single exposure*

The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### *Specific target organ systemic toxicity - repeated exposure*

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### *Aspiration hazard*

Regarding the available data the classification criteria are not fulfilled.

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### Carcinogenicity

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

### Further information

After long-term exposure to the chemical:

Dermatitis

After absorption of toxic quantities:

Systemic effects:

Headache, drowsiness, Dizziness, euphoria, agitation, spasms, narcosis

Effect potentiated by: ethanol

Damage to:

Kidney, Central nervous system, Liver

Further data:

Handle in accordance with good industrial hygiene and safety practice.

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## SECTION 12. Ecological information

### Ecotoxicity

No information available.

### Persistence and degradability

No information available.

### Bioaccumulative potential

*Partition coefficient: n-octanol/water*

log Pow: 3.12

(experimental)

(Lit.) A remarkable bioaccumulation potential is expected (log Po/w >3).

### Mobility in soil

*Distribution among environmental compartments*

Adsorption/Soil

log Koc: 2.29 - 2.49

(experimental)

Moderately mobile in soils

### Other adverse effects



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*Henry constant*  
772 Pa\*m<sup>3</sup>/mol  
Method: (experimental)  
(Lit.) Distribution preferentially in air.

*Additional ecological information*  
Discharge into the environment must be avoided.

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**SECTION 13. Disposal considerations**

The information presented 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. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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**SECTION 14. Transport information**

**Land transport (DOT)**

UN number	UN 1307
Proper shipping name	XYLENES
Class	3
Packing group	III
Environmentally hazardous	--

**Air transport (IATA)**

UN number	UN 1307
Proper shipping name	XYLENES
Class	3
Packing group	III
Environmentally hazardous	--
Special precautions for user	no

**Sea transport (IMDG)**

UN number	UN 1307
Proper shipping name	XYLENES
Class	3
Packing group	III
Environmentally hazardous	--
Special precautions for user	yes
EmS	F-E S-D

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**SECTION 15. Regulatory information**

**United States of America**

**SARA 313**

The following components are subject to reporting levels established by SARA Title III, Section 313:

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*Ingredients*

xylene (mixture of isomers) 1330-20-7 100 %

**SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

*Ingredients*

xylene (mixture of isomers)

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

*Ingredients*

xylene (mixture of isomers)

**DEA List I**

Not listed

**DEA List II**

Not listed

**Massachusetts Right To Know**

*Ingredients*

xylene (mixture of isomers)

**Pennsylvania Right To Know**

*Ingredients*

xylene (mixture of isomers)

**New Jersey Right To Know**

*Ingredients*

xylene (mixture of isomers)

**Notification status**

TSCA: All components of the product are listed in the TSCA-inventory.

DSL: All components of this product are on the Canadian DSL.

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**SECTION 16. Other information**

**Training advice**

Provide adequate information, instruction and training for operators.

**Labeling**

*Hazard pictograms*



*Signal Word*

Warning

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### *Hazard Statements*

H226 Flammable liquid and vapor.

H312 + H332 Harmful in contact with skin or if inhaled.

H315 Causes skin irritation.

### *Precautionary Statements*

#### Prevention

P210 Keep away from heat.

#### Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P313 Get medical advice/ attention.

### **Full text of H-Statements referred to under sections 2 and 3.**

H226	Flammable liquid and vapor.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H332	Harmful if inhaled.

### **Key or legend to abbreviations and acronyms used in the safety data sheet**

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

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The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to appropriate safety precautions. It does not represent a warranty of any product properties and we assume no liability for any loss or injury which may result from the use of this information. Users should conduct their own investigations to determine the suitability of the information.

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