

# Safety Data Sheet

According to Hazardous Products Regulation (SOR/2015-17)

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## SECTION 1: Identification

### Product identifier

Trade name/designation:	Xylene ACS
Product No.:	BDH2000
Synonymes:	none/none
CAS No.:	not applicable
Other means of identification:	

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

Recommended Use:	For Further Manufacturing Use Only
Uses advised against:	Not for Human or Animal Drug Use

### Details of the supplier of the safety data sheet

#### Supplier

##### **VWR International**

Street	2360 Argentia Road
Postal code/City	Mississauga, Ontario Canada L5N 5Z7
Telephone	+1-800-932-5000 toll-free within US/Canada
Telefax:	+1-610-728-2103

### Emergency phone number

Telephone +1-613-996-6666 (Canutec, 24 hrs/day, 7 days/week, Canada)

### Preparation Information

VWR International - Product Information Compliance

E-mail sds@vwr.com

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

#### Classification according to Hazardous Products Regulation (SOR/2015-17)

Hazard classes and hazard categories	Hazard statements
Flammable liquid, category 3	H226
Acute toxicity, category 4, dermal and inhalation	H312+H332
Aspiration hazard, category 1	H304
Skin irritation, category 2	H315
Eye irritation, category 2	H319
Carcinogenicity, category 2	H351
Specific target organ toxicity (repeated exposure), category 2	H373

### 2.2 Label elements

#### Labelling in accordance with (SOR/2015-17)

#### Hazard pictograms



Signal word: Danger

Hazard statements	
H226	Flammable liquid and vapor.
H312+H332	Harmful in contact with skin or if inhaled.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements	
P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P310	IF exposed or concerned: Immediately call a POISON CENTER/doctor.
P403+P235	Store in a well-ventilated place. Keep cool.

#### Hazards not otherwise classified (HNOC)

none/none

## SECTION 3: Composition / information on ingredients

### 3.1 Substances

not applicable

### 3.2 Mixtures

#### Hazardous ingredients GHS Classification in accordance with (SOR/2015-17)

Substance name	Concentration	Identifier	Hazard classes and hazard categories
Xylene (mixture of isomers)	60 - 90%	CAS No.: 1330-20-7	Flam. Liq. 3 - H226 Acute Tox. 4 - H312+H332 Skin Irrit. 2 - H315
Ethylbenzene	10 - 30%	CAS No.: 100-41-4	Flam. Liq. 2 - H225 Acute Tox. 4 - H332 Asp. Tox. 1 - H304 STOT RE 2 - H373
Toluene	< 1%	CAS No.: 108-88-3	Flam. Liq. 2 - H225 Asp. Tox. 1 - H304 Skin Irrit. 2 - H315 Repr. 2 - H361 STOT RE 2 - H373 STOT SE 3 - H336

## SECTION 4: First aid measures

### 4.1 General information

IF exposed: Immediately call a POISON CENTER/doctor. If unconscious but breathing normally, place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

### **In case of inhalation**

Immediately call a POISON CENTER/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

### **In case of skin contact**

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

### **After eye contact**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

### **In case of ingestion**

Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth thoroughly with water. Give nothing to eat or drink.

### **Self-protection of the first aider**

First aider: Pay attention to self-protection!

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

no data available

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

no data available

## **SECTION 5: Fire fighting measures**

### **5.1 Extinguishing media**

#### **Suitable extinguishing media**

Water spray  
ABC-powder  
Carbon dioxide (CO<sub>2</sub>)  
Nitrogen

#### **Extinguishing media which must not be used for safety reasons**

no restriction

### **5.2 Specific hazards arising from the chemical**

In case of fire may be liberated:  
Pyrolysis products, toxic

### **5.3 Advice for firefighters**

DO NOT fight fire when fire reaches explosives.  
Protective equipment and precautions for firefighters  
Wear a self-contained breathing apparatus and chemical protective clothing.

### **Additional information**

Do not allow run-off from fire-fighting to enter drains or water courses.  
Do not inhale explosion and combustion gases.  
Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.

Use water spray/stream to protect personnel and to cool endangered containers.  
In case of fire: Evacuate area.

## SECTION 6: Accidental release measures

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

Remove all sources of ignition. Use personal protection equipment. Special danger of slipping by leaking/spilling product. In case of major fire and large quantities: Remove persons to safety. Wear a self-contained breathing apparatus and chemical protective clothing.

### 6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

### 6.3 Methods and material for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Clean contaminated articles and floor according to the environmental legislation. Collect in closed and suitable containers for disposal.

### 6.4 Additional information

Clear spills immediately.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:

Inhalation

skin contact

Eye contact

Use extractor hood (laboratory).

If handled uncovered, arrangements with local exhaust ventilation have to be used.

If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

### 7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: no data available

Keep container tightly closed and in a well-ventilated place. Keep/Store only in original container.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Ingredient (Designation)	Regulatory information	Country	Limit value type (country of origin)	Limit value
Xylene (mixture of isomers)	CNESST	CA	VECD	651 mg/m <sup>3</sup> - 150 ppm
Xylene (mixture of isomers)	CNESST	CA	VEMP	434 mg/m <sup>3</sup> - 100 ppm
Ethylbenzene	CNESST	CA	VECD	543 mg/m <sup>3</sup> - 125 ppm
Ethylbenzene	CNESST	CA	VEMP	434 mg/m <sup>3</sup> - 100 ppm
Toluene	CNESST	CA	VEMP	188 mg/m <sup>3</sup> - 50 ppm

## 8.2 Engineering controls

### **Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

### **Personal protection equipment (PPE)**

Wear suitable protective clothing. When handling with chemical substances, protective clothing must be worn.

#### *Eye/face protection*

Eye glasses with side protection

#### *Skin protection*

Wear suitable gloves. When handling with chemical substances, protective gloves must be worn. In the case of wanting to use the gloves again, clean them before taking off and air them well. Check leak tightness/impermeability prior to use.

#### *Respiratory protection*

Respiratory protection necessary at: aerosol or mist formation If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

#### *Additional information*

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

#### *Environmental exposure controls*

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state:	liquid
Color:	colorless
(b) Odour:	no data available
(c) Odour threshold:	no data available

#### Safety relevant basic data

(d) pH:	no data available
(e) Melting point/freezing point:	no data available
(f) Initial boiling point and boiling range:	138-142 °C
(g) Flash point:	27 °C (closed cup)
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	Flammable liquid and vapor.
(j) Flammability or explosive limits	
Lower explosion limit:	no data available
Upper explosion limit:	no data available
(k) Vapour pressure:	0.9 kPa (20 °C)
(l) Vapour density:	3.7
(m) Relative density:	0.87 g/cm <sup>3</sup> (20 °C)
(n) Solubility(ies)	
Water solubility (g/L):	no data available
Soluble (g/L) in Ethanol:	no data available
(o) Partition coefficient: n-octanol/water:	no data available
(p) Auto-ignition temperature:	432 °C
(q) Decomposition temperature:	no data available
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable

### 9.2 Other information

Bulk density:	no data available
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry's Law Constant:	no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

no data available

## 10.2 Chemical stability

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

## 10.3 Possibility of hazardous reactions

no data available

## 10.4 Conditions to avoid

no data available

## 10.5 Incompatible materials

no data available

## 10.6 Hazardous decomposition products

no data available

## 10.7 Additional information

no data available

# SECTION 11: Toxicological information

## 11.1 Information on toxicological effects

### Acute effects

#### *Acute oral toxicity:*

Xylene (mixture of isomers) - LD50: > 2840 mg/kg - Rat - (Merck KGaA)

Ethylbenzene - LD50: > 3500 mg/kg - Rat - (IUCLID)

Toluene - LD50: > 636 mg/kg - Rat - (IUCLID)

#### *Acute dermal toxicity:*

Xylene (mixture of isomers) - LD50: < 4350 mg/kg - Rabbit - (IUCLID)

Ethylbenzene - LD50: > 15354 mg/kg - Rabbit - (IUCLID)

Toluene - LD50: > 12124 mg/kg - Rabbit - (IUCLID)

#### *Acute inhalation toxicity:*

Xylene (mixture of isomers) - LC50: 29,08 mg/l - Rat - (Japan GHS Basis for Classification Data)

Ethylbenzene - LC50: 17,2 mg/l - Rat - (IUCLID)

Toluene - LC50: 12,5 mg/l - Rat - (Japan GHS Basis for Classification Data)



**Irritant and corrosive effects**

*Primary irritation to the skin:*

Causes skin irritation.

*Irritation to eyes:*

Causes serious eye irritation.

*Irritation to respiratory tract:*

not applicable

**Respiratory or skin sensitization**

In case of skin contact: not sensitising

In case of inhalation: not sensitising

**STOT-single exposure**

not applicable

**STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

no data available	ACGIH	IARC	NTP	OSHA

**Germ cell mutagenicity**

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

No indications of human reproductive toxicity exist.

**Aspiration hazard**

May be fatal if swallowed and enters airways.

**Other adverse effects**

no data available

**Additional information**

no data available

**SECTION 12: Ecological information****12.1 Ecotoxicity****Fish toxicity:**

Xylene (mixture of isomers) - LC50: 15.7 mg/l (96 h) - R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212

Xylene (mixture of isomers) - LC50: 15.7 mg/l (96 h) - R.C.Bahner and D.J.Hansen (Eds.), Aquatic Toxicology and Hazard Assessment, 8th Symposium, ASTM STP 891, Philadelphia, PA :193-212

Toluene - LC50: 31.7 mg/l (96 h) - Geiger, D.L., L.T. Brooke, and D.J. Call 1990. Acute Toxicities of Organic Chemicals to Fathead Minnows (*Pimephales promelas*), Volume 5. Ctr.for Lake Superior Environ.Stud., Univ.of Wisconsin-Superior, Superior, WI :332 p.

**Daphnia toxicity:**

Xylene (mixture of isomers) - LC50: 8.5 mg/l (48 h) - Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. *Estuar.Coast.Mar.Sci.* 6(4):365-373

Xylene (mixture of isomers) - LC50: 8.5 mg/l (48 h) - Tatem, H.E., B.A. Cox, and J.W. Anderson 1978. The Toxicity of Oils and Petroleum Hydrocarbons to Estuarine Crustaceans. *Estuar.Coast.Mar.Sci.* 6(4):365-373

Toluene - EC50: 9.24 mg/l (48 h) - MacLean, M.M., and K.G. Doe 1989. The Comparative Toxicity of Crude and Refined Oils to *Daphnia magna* and *Artemia*. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p

Toluene - LC50: 92 mg/l (48 h) - MacLean, M.M., and K.G. Doe 1989. The Comparative Toxicity of Crude and Refined Oils to *Daphnia magna* and *Artemia*. Environment Canada, EE-111, Dartmouth, Nova Scotia :64 p.

**Algae toxicity:**

Toluene - EC50: 12.5 mg/l (72 h) - Galassi, S., M. Mingazzini, L. Vigano, D. Cesareo, and M.L.Tosato 1988. Approaches to Modeling Toxic Responses of Aquatic Organisms to Aromatic Hydrocarbons. *Ecotoxicol.Environ.Saf.* 16(2):158-169

**Bacteria toxicity:**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

Partition coefficient: n-octanol/water: no data available

**12.4 Mobility in soil:**

no data available

**12.5 Results of PBT/vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## 12.6 Other adverse effects

no data available

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

#### Appropriate disposal / Package

Dispose according to legislation. Handle contaminated packages in the same way as the substance itself.

#### Additional information

no data available

## SECTION 14: Transport information

### Land transport (TDG)

UN-No.:	1307
Proper Shipping Name:	XYLENES
Class(es):	3
Packing group:	III
Environmental hazards:	No
Marine pollutant:	No
Special precautions for user:	

### Sea transport (IMDG)

UN-No.:	1307
Proper Shipping Name:	XYLENES
Class(es):	3
Classification code:	
Hazard label(s):	3
Packing group:	III
Environmental hazards:	No
Marine pollutant:	No
Special precautions for user:	
Segregation group:	-
EmS-No.	F-E S-D
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	not relevant

### Air transport (ICAO-TI / IATA-DGR)

UN-No.:	1307
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Proper Shipping Name:	XYLENES
Class(es):	3
Classification code:	
Hazard label(s):	3
Packing group:	III
Special precautions for user:	

## SECTION 15: Regulatory information

### Safety, health and environmental regulations/legislation specific for the substance or mixture

Domestic Substance List:

## SECTION 16: Other information

### Abbreviations and acronyms

H225 - Highly flammable liquid and vapor.  
H226 - Flammable liquid and vapor.  
H304 - May be fatal if swallowed and enters airways.  
H312+H332 - Harmful in contact with skin or if inhaled.  
H315 - Causes skin irritation.  
H332 - Harmful if inhaled.  
H336 - May cause drowsiness or dizziness.  
H361 - Suspected of damaging fertility or the unborn child.  
H373 - May cause damage to organs through prolonged or repeated exposure.

ACGIH - American Conference of Governmental Industrial Hygienists  
DOT - Department of Transportation  
IARC - International Agency for Research on Cancer  
IATA-DGR - International Air Transport Association-Dangerous Goods Regulations  
ICAO-TI - International Civil Aviation Organization-Technical Instructions  
IMDG - International Maritime Code for Dangerous Goods  
LTV - Long Term Value  
NIOSH - National Institute for Occupational Safety and Health  
NTP - National Toxicology Program  
OSHA - Occupational Safety & Health Administration  
PBT - Persistent, Bioaccumulative and Toxic  
PEL - Permissible Exposure Limit  
STV - Short Term Value  
SVHC - Substances of Very High Concern  
TDG - Transport of Dangerous Goods  
TLV - Threshold Limit Value  
vPvB - very Persistent, very Bioaccumulative

Training advice: Provide adequate information, instruction and training for operators.

**Classification according to Regulation (EC) No 1272/2008 [CLP] - Classification procedure**

Hazard statements	Hazard classes and hazard categories	Classification procedure
H226	Flam. Liq. 3	Data obtained by expert judgement.
H312+H332	Acute Tox. 4	Calculation method.
H304	Asp. Tox. 1	Calculation method.
H315	Skin Irrit. 2	Calculation method.
H319	Eye Irrit. 2	Calculation method.
H351	Carc. 2	Calculation method.
H373	STOT RE 2	Calculation method.

**Additional information**

Indication of changes      general update

If you need an explanation of the change, contact the supplier. (SDS@avantorsciences.com)

*The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guidance. The information in this document is based on the present state knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. VWR International and his Affiliates shall not be held liable for any damage resulting from handling.*