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

Date of issue: 10/30/2014

SECTION 1. Identification

Product identifier

Product number  XX0055
Product name  Xylenes GR ACS
CAS-No.  1330-20-7

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

Identified uses  Reagent for analysis

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)

Emergency telephone  800-424-9300 CHEMTREC (USA)
+1-703-527-3887 CHEMTREC (International)
24 Hours/day; 7 Days/week

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

Signal Word
Warning

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

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

<table>
<thead>
<tr>
<th>Formula</th>
<th>C₆H₄(CH₃)₂</th>
<th>C₈H₁₀ (Hill)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molar mass</td>
<td>106.17 g/mol</td>
<td></td>
</tr>
</tbody>
</table>

*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.

**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.
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.

SECTION 5. Fire-fighting measures

Extinguishing media
Suitable extinguishing media
Carbon dioxide (CO2), 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.

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).
Take up with liquid-absorbent material (e.g. Chemizorb®). 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)

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Basis</th>
<th>Value</th>
<th>Threshold limits</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>xylene (mixture of isomers)</strong> 1330-20-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACGIH</td>
<td>Short Term Exposure Limit (STEL):</td>
<td>150 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time Weighted Average (TWA):</td>
<td>100 ppm</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recommended exposure limit (REL):</td>
<td>100 ppm</td>
<td>435 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recommended exposure limit (REL):</td>
<td>100 ppm</td>
<td>435 mg/m³</td>
<td></td>
</tr>
<tr>
<td>NIOSH/GUIDE</td>
<td>Short Term Exposure Limit (STEL):</td>
<td>150 ppm</td>
<td>655 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short Term Exposure Limit (STEL):</td>
<td>150 ppm</td>
<td>655 mg/m³</td>
<td></td>
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<tr>
<td></td>
<td>Recommended exposure limit (REL):</td>
<td>100 ppm</td>
<td>435 mg/m³</td>
<td></td>
</tr>
<tr>
<td>OSHA_TRANS</td>
<td>PEL:</td>
<td>100 ppm</td>
<td>435 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z1A</td>
<td>Short Term Exposure Limit (STEL):</td>
<td>150 ppm</td>
<td>655 mg/m³</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time Weighted Average (TWA):</td>
<td>100 ppm</td>
<td>435 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

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

SECTION 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>aromatic</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Melting point</td>
<td>&gt; -34 °C</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td>279 - 289 °F (137 - 143 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>77 °F (25 °C)</td>
</tr>
<tr>
<td>Method</td>
<td>c.c.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>1.0 %(V)</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>7.0 %(V)</td>
</tr>
</tbody>
</table>
Vapor pressure 10 hPa  
 at 68 °F (20 °C)

Relative vapor density 3.7

Density 0.86 g/cm³  
 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

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.
Incompatible materials
rubber, various plastics, Light metals

Hazardous decomposition products
no information available

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.
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.

SECION 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
SAFETY DATA SHEET
according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Product number  XX0055  Version  1.0
Product name  Xylenes GR ACS

Henry constant
772 Pa*m³/mol
Method:  (experimental)
(Lit.) Distribution preferentially in air.

Additional ecological information
Discharge into the environment must be avoided.

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.

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

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:
Inhalation: Get Victim to Fresh Air. If Not Breathing, Give Artificial Respiration. If Convulsions Occur, Do Not Restrain. Call Doctor.

Ingestion: Do Not Induce Vomiting. Give 2-3 glasses of Water or Milk. Call Doctor.

Skin Contact: Remove contaminated clothing and shoes. Wash skin with soap and water.

Eye Contact: Rinse Eyes immediately with large amounts of water for 15 minutes. If irritation persists, call Doctor.

TREATMENT: Use appropriate medical care. 

STORAGE: Store in a cool area. Use with adequate ventilation. 

DISPOSAL: Disposal must be in accordance with applicable laws and regulations.

FAA: 

DOT: 

IC:

UN No.: 

PROPERTIES:

Flash Point: 

Boiling Point: 

Melting Point: 

Specific Gravity: 

Solubility: 

PH: 

PH Neutralizer: 

Fire and Explosion Characteristics: 

Fire Extinguishing: 

Inert Gas: 

Special Fire Fighting Procedures: 

Special Protection Equipment: 

Health Hazards: 

Acute Toxicity: 

Mutagenicity: 

Carcinogenicity: 

Reproductive Toxicity: 

Physical Hazards: 

Stability: 

Reactivity: 

Precautions: 

Prevent from entering sewers and waterways. 

HAZARDS IDENTIFIER:

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) 1330-20-7 100 %

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.

SECTION 16. Other information

Training advice

Provide adequate information, instruction and training for operators.

Labeling

Hazard pictograms

Signal Word

Warning
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.

Date of issue: 10/30/2014

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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