



Revision date: 3/31/2015

Version: 1

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1. Product identifier**

Trade name/designation:	Xylene Substitute
Product No.:	89370-090
Other means of identification: Mineral Spirits, Aliphatic Hydrocarbon	

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Relevant identified uses: Clearing, deparaffinization

**1.3. Details of the supplier of the safety data sheet**

Company VWR International, LLC  
Radnor Corporate Center  
100 Matsonford Road  
Radnor, PA 19087-8660  
Telephone 610.386.1700

**1.4. Emergency Telephone number**

CHEMTREC 800.424.9300  
CANUTEC 613.996.6666

**SECTION 2: Hazards identification**

**2.1. Classification of the substance or mixture**

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Hazard classes and hazard categories	Hazard statements
Flammable Liquid Category 3	Flammable liquid and vapor.
Aspiration Toxicity Category 1	Fatal if Inhaled.
Aquatic Chronic Category 4	May cause long lasting effects to aquatic life.

**2.2. GHS Label elements, including precautionary statements**



Signal word: Danger!



Hazard statements	
H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposures may cause skin dryness or cracking.

Precautionary statements	
P210	Keep away from heat/sparks/open flames/hot surfaces. – No
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 measure against static discharge.
P273	Avoid release to the environment.
P280	Wear protective gloves, protective clothing and eye protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P331	Do NOT induce vomiting.
P370+P378	In case of fire: use dry chemical, foam or water spray for
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of container/contents to approved disposal site in accordance with all local and national regulations.

**2.3. WHIMS Classification:** B2: Flammable Liquid

**2.4. Hazards not otherwise classified (HNOC) or not covered by GHS or WHIMS:** N/A

## SECTION 3: Composition / information on ingredients

### 3.1. Hazard components

Chemical name	Molecular Weight	CAS#	Weight%
Aliphatic Hydrocarbon	155 g/mol	64742-48-9	100



## SECTION 4: First aid measures

### 4.1. General information

**In case of 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 if irritation persists.

**In case of skin contact:** In case of contact, 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 if irritation persists.

**In case of 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 if irritation persists.

**In case of ingestion:** If swallowed, rinse out mouth with water. Aspiration hazard. DO NOT induce vomiting. If vomiting occurs, keep head below hips to prevent aspiration into the lungs. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention.

### 4.2. Most important symptoms and effects, both acute and delayed

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

Note to Physician: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

## SECTION 5: Firefighting measures

**5.1. Extinguishing media:** Use water spray, alcohol resistant foam, dry chemical or carbon dioxide. DO NOT use water jet.

**5.2. Special hazards arising from the substance or mixture:** Flammable liquid and vapor. Vapors are heavier than air and will travel along surfaces to ignition sources. Vapors will collect in low areas. Vapors may be ignited by static sparks.

### 5.3. Special protective equipment for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

**5.4. Hazardous combustion products:** Oxides of carbon, Incomplete combustion products, smoke, fumes.

**5.5. Advice for firefighters** 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. Avoid runoff into storm sewers and ditches which lead to waterways.

**5.6. Additional information**

## SECTION 6: Accidental release measures

**6.1. Personal precautions, protective equipment and emergency procedures:** Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. Absorb with an inert dry material and place in an appropriate waste disposal container. See section 8 for advice on the minimum requirements for personal protective equipment. Normal antistatic work clothes are usually adequate.

**6.2. Environmental precautions:** Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements and confined areas.

**6.3. Methods and material for containment and 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. 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. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor, but may not prevent ignition in closed places. Note: see section 1 for emergency contact information and section 13 for waste disposal. Full body suit of chemical resistant, antistatic material is recommended.

**6.4. Additional information**

## SECTION 7: Handling and storage



**7.1. Precautions for safe handling:** Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds do not eliminate the hazard from static accumulation. Consult local applicable standards for guidance.

**7.2. Conditions for safe storage, including any incompatibilities:** Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard. Material can accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or ground procedures. However, bonding and grounds do not eliminate the hazard from static accumulation. Consult local applicable standards for guidance.

**7.3. Specific end use(s)**

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Chemical Name	Limit value type & Country of Origin	Exposure Limit value	Source
Aliphatic Hydrocarbon	TWA (US)	2000 mg/m <sup>3</sup> / 500 ppm	OSHA PEL
	TWA (US)	1800 mg/m <sup>3</sup> 350 ppm 15 min.	NIOSH REL

### 8.2. Exposure controls

**Appropriate engineering controls:** General room or local exhaust ventilation is usually required to meet exposure limit(s). Use explosion proof ventilation equipment. Electrical equipment should be grounded and conform to applicable electrical code.

#### Personal protection equipment

**Eye/face protection:** Use chemical safety goggles and/or a full face shield where splashing is possible. Use equipment approved by appropriate government standards, such as NIOSH (US) or EN166 (EU). Maintain eye wash fountain and quick-drench facilities in work area.

**Skin protection:** Choose body protection according to the amount and concentration of the dangerous substance at the work place. Recommended: Lab coat or apron.

**Respiratory protection:** If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Where risk assessment shows air-purifying respirators are

appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Hygiene measures

### SECTION 9: Physical and Chemical Properties

#### 9.1. Information on basic physical and chemical properties

- a) Appearance: Clear  
Physical state: Liquid  
Color : Colorless
- b) Odor: Odorless
- c) Odor Threshold N/A
- d) pH N/A
- e) Melting point/freezing point N/A
- f) Initial boiling point  
and boiling range: 180°C (356°F) - 188°C (370°F)
- g) Flash point: >54°C (129°F) – closed cup
- h) Evaporation rate (n-butyl acetate =1): 0.16
- i) Flammability (solid, gas) N/A
- j) Upper/lower flammability  
or explosive limits
- k) Vapor pressure (mmHg): 0.56 mmHg
- l) Vapor density (Air =1): 5.4
- m) Relative density: Not available
- n) Solubilities : Negligible solubility in water
- o) Partition coefficient (n-Octanol/Water): Not available
- p) Auto-ignition temperature: 343°C (649°F)
- q) Decomposition temperature: Not available
- r) Viscosity: Not available
- s) Explosive properties: Not available
- t) Oxidizing properties: Not available

#### 9.2. Other information

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

**10.2. Chemical stability:** Product is stable under normal conditions of use.

**10.3. Possibility of hazardous reactions:** No hazardous polymerization.

**10.4. Conditions to avoid:** Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

**10.5. Incompatible materials:** Strong Oxidizers

**10.6. Hazardous decomposition products:** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicology

### 11.1. Information on toxicological effects

#### Acute toxicity

**Oral LD<sub>50</sub>** Rat >5000 mg/kg

**Inhalation LC<sub>50</sub>** Rat >5000 mg/m<sup>3</sup> 8 hour(s)

**Dermal LD<sub>50</sub>** Rabbit >5000 mg/kg

**Other information on acute toxicity** No data available

#### Skin corrosion/irritation

Mildly irritating to skin with prolonged exposure. Based on test data for structurally similar materials.

#### Serious eye damage/eye irritation

Eyes: May cause mild, short-lasting discomfort to the eyes. Based on test data for structurally similar materials

#### Respiratory or skin sensitization

No end point data for material – Not expected to be a respiratory sensitizer

Not expected to be a skin sensitizer

#### Germ cell mutagenicity

Not expected to be a germ cell mutagen.

#### Carcinogenicity

Not an expected carcinogen.

#### Reproductive toxicity

No data available

#### Specific target organ toxicity-single exposure

Not expected to cause organ damage from a single exposure

#### Specific target organ toxicity-repeated exposure

Not expected to cause organ damage from prolonged or repeated exposure.

#### Aspiration hazard

May be fatal if swallowed and enters airways

**Additional information**

**Potential health effects**

**Inhalation** Toxic if inhaled. Causes respiratory tract irritation.

**Ingestion** Toxic if swallowed.

**Skin** Toxic if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye irritation.

**SECTION 12: Ecological information**

**12.1. Ecotoxicity:**

Aquatic – Acute toxicity:

96 hour(s) Oncorhynchus mykiss (rainbow trout) LLO 1000 mg/l

48 hour(s) Daphnia magna (water flea) ELO 1000 mg/l

72 hour(s) Pseudokirchnerilla subcapitata ELO 1000 mg/l

**12.2. Persistence and degradability:** Expected to be inherently biodegradable.

**12.3. Bioaccumulative potential:** No Data Available

**12.4. Mobility in soil:** No Data Available

**12.5. Results of PBT and vPvB assessment:** No Data Available

**12.6. Other adverse effects**

Product can be considered an environmental hazard through improper handling and improper disposal. Product is considered toxic to aquatic life with long lasting effects

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods:** Based on material supplied: Disposal must be in accordance with current provincial, local, state, and federal regulations.

Disposal of unused product may be subject to RCRA regulations. RCRA: D001 IGNITABILITY

**SECTION 14: Transport information**

**Land Transport DOT (U.S.)**

UN Number: UN1268

Proper Shipping name: Petroleum Distillates, N.O.S.



Transport Hazard Classes

Class: 3

Hazard Label(s) Flammable liquid

Packing Group: III

Environmental hazard(s)

Special precautions for user

### Sea Transport IMDG

UN Number: UN1268

Proper Shipping name: Petroleum Distillates, N.O.S.

Transport Hazard Classes

Class: 3

Hazard Label(s) Flammable liquid

EMS- No. F-E,S-E

Packing Group: III

Environmental hazard(s)

Segregation Group

Special precautions for user

### Air Transport IATA

UN Number: UN1268

Proper Shipping name: Petroleum Distillates, N.O.S.

Transport Hazard Classes

Class: 3

Hazard Label(s) Flammable liquid

Packing Group: III

Environmental hazard(s)

Special precautions for user

## SECTION 15: Regulatory information

### OSHA Hazards

Flammable liquid

### SARA 302 Extremely Hazardous Substances

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

### SARA 313 (TRI reporting)

This material contains no chemicals subject to the supplier notification requirements of the SARA 313

Toxic Release Program.

**SARA 311/312 Hazardous Chemicals MSDS distribution – chemical inventory – hazard identification**

Fire. Immediate health. Delayed health

**Massachusetts Right-To-Know Substance List:** Petroleum distillates

**Pennsylvania Right-To-Know Hazardous substances:** Petroleum distillates

**New Jersey Worker and Community Right-To-Know Components:** Petroleum distillates

**California Proposition 65:**

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Inventory status:

Canada DSL/NDSL Inventory List: Listed

US TSCA Inventory List: Listed

EINECS, ELINCS or NLP: Listed

## SECTION 16: Other information

**Canadian Carcinogenicity hazard class: Not classified**

**PHNOC hazard class: Not classified**

**HHNOC hazard class: Not classified**

**Biohazardous Infectious Materials hazard class: Not classified**

**NFPA Rating:**

**Health:1**

**Flammability:2**

**Reactivity:0**

**Special Hazard:**



**DISCLAIMER**

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our 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 its Affiliates shall not be held liable for any damage resulting from handling.