

Material Safety Data Sheet

XYLENE SUBSTITUTE

Section 1 - Chemical Product and Company Identification

MSDS Name: XYLENE SUBSTITUTE

Catalog Numbers: 23410-01

Synonyms: None.

Company Identification:

ELECTRON MICROSCOPY SCIENCES

1560 INDUSTRY ROAD

HATFIELD PA 19440

For information, call: 215-412-8400

Emergency Number: 215-412-8400

For CHEMTREC assistance, call: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
8052-41-3	Stoddard solvent	<100	232-489-3
64741-66-8	Naphtha (petroleum), light alkylate	<100	265-068-8
68551-16-6	C9-11-isoalkanes	<100	271-365-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 23.9 deg C.

Warning! Flammable liquid and vapor. Aspiration hazard if swallowed. Can enter lungs and cause damage. May cause eye and skin irritation. May cause respiratory tract irritation. May cause central nervous system depression.

Target Organs: Central nervous system.

Potential Health Effects

Eye: May cause eye irritation and possible burns.

Skin: May cause skin irritation. May be absorbed through the skin.

Ingestion: Aspiration hazard. May cause gastrointestinal irritation with nausea,

vomiting and diarrhea. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma.

Chronic: Prolonged or repeated exposure may cause nausea, dizziness, and headache.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cups of milk or water. Never give anything by mouth to an unconscious person. Possible aspiration hazard. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Flammable liquid and vapor. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. May be ignited by heat, sparks, and flame. Vapors may form an explosive mixture with air. Containers may explode when heated.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Use water spray to cool fire-exposed containers. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. Cool containers with flooding quantities of water until well after fire is out.

Flash Point: 23.9 deg C (75.02 deg F)

Autoignition Temperature: Not applicable.

Explosion Limits, Lower:0.6

Upper: 7.0

NFPA Rating: (estimated) Health: 1; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor but may not prevent ignition in closed spaces.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Stoddard solvent	100 ppm TWA	350 mg/m ³ TWA 20000 mg/m ³ IDLH	500 ppm TWA; 2900 mg/m ³ TWA
Naphtha (petroleum), light alkylate	none listed	none listed	none listed
C9-11-isoalkanes	none listed	none listed	none listed

OSHA Vacated PELs: Stoddard solvent: 100 ppm TWA; 525 mg/m³ TWA Naphtha

(petroleum), light alkylate: No OSHA Vacated PELs are listed for this chemical. C9-11-isoalkanes: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: colorless

Odor: hydrocarbon-like

pH: Not available.

Vapor Pressure: Not available.

Vapor Density: >1

Evaporation Rate: Not available.

Viscosity: Not available.

Boiling Point: 140-168.3 deg C

Freezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: Negligible.

Specific Gravity/Density: Not available.

Molecular Formula: Not available.

Molecular Weight: Not available.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Ignition sources, excess heat.

Incompatibilities with Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Oxides of carbon.

Hazardous Polymerization: Has not been reported

Section 11 - Toxicological Information

RTECS#:**CAS#** 8052-41-3: WJ8925000**CAS#** 64741-66-8: QK7970000**CAS#** 68551-16-6 unlisted.**LD50/LC50:**

CAS# 8052-41-3:

Draize test, rabbit, eye: 500 mg/24H Moderate;

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CAS# 64741-66-8:

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CAS# 68551-16-6:

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Carcinogenicity:

CAS# 8052-41-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 64741-66-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 68551-16-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: Epidemiological studies involving petroleum refinery workers indicate persons with routine exposure to petroleum or one of its constituents may be at an increased risk to the development of benign neoplasms, digestive tract cancer, and skin cancer.

Teratogenicity: No information found**Reproductive Effects:** No information found**Mutagenicity:** No information found**Neurotoxicity:** No information found**Other Studies:**

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.**RCRA U-Series:** None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	PETROLEUM DISTILLATES, N.O.S.	PETROLEUM DISTILLATES NOS (NAPHTHA, PETROLEUM)
Hazard Class:	3	3
UN Number:	UN1268	UN1268
Packing Group:	III	II
Additional Info:		FP23.89C

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 8052-41-3 is listed on the TSCA inventory.

CAS# 64741-66-8 is listed on the TSCA inventory.

CAS# 68551-16-6 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 8052-41-3: immediate, delayed, fire.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 8052-41-3 can be found on the following state right to know lists:
California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

CAS# 64741-66-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 68551-16-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

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Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.

R 45 May cause cancer.

Safety Phrases:

S 16 Keep away from sources of ignition - No smoking.

S 23 Do not inhale gas/fumes/vapour/spray.

S 24/25 Avoid contact with skin and eyes.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 51 Use only in well-ventilated areas.

S 53 Avoid exposure - obtain special instructions before use.

WGK (Water Danger/Protection)

CAS# 8052-41-3: No information available.

CAS# 64741-66-8: No information available.

CAS# 68551-16-6: 1

Canada - DSL/NDSL

CAS# 8052-41-3 is listed on Canada's DSL List.

CAS# 64741-66-8 is listed on Canada's DSL List.

CAS# 68551-16-6 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B2.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 8052-41-3 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 1/09/1998

Revision #9 Date: 10/31/2007

The information above is believed to be accurate and represents the best information currently available to us.

However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall EMS be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if EMS has been advised of the possibility of such damages.