



SAFETY DATA SHEET

440-50M

1. Identification

Name of the product: 440-50M

Material code: 1025

Product class: Alkyd Resin Solution

Recommended use: Coatings

Producer:

Deltech Resin Company

49 Rutherford Street, Newark, NJ 07105

Telephone no. +1-973-589-3331

Emergency no. 1-800-424-9300

2. Hazard(s) identification

Classification:

Flammable liquids

Carcinogenicity

Specific target organ toxicity (repeated exposure)

Chronic aquatic toxicity

Category 3

Category 2

Category 1

Category 3

Labeling:



Signal word: Danger

Hazard statement:

H226 - Flammable liquid and vapor.

H304 - May be fatal if swallowed and enters airways

H351 - Suspected of causing cancer.

H372 - Causes damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long-lasting effects

Precautionary statements:

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

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

P260 - Do not breathe mist, vapors, spray

P264 - Wash exposed skin thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P273 - Avoid release to the environment

P280 - Wear protective gloves, protective clothing, eye protection, face protection

P301+P310 - IF SWALLOWED: immediately call a POISON CENTER or doctor/physician

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

P308+P313 - IF exposed or concerned: Get medical advice/attention

P331 - If swallowed, do NOT induce vomiting

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 carbon dioxide (CO₂), powder, alcohol-resistant foam for extinction

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to comply with local, state and federal regulations

HMIS: Health 2* Flammability 2 Reactivity 0

3. Composition / Information on ingredients

Component	Common Name	CAS No.	Weight %	Status
Alkyd Resin		Proprietary	49 - 61	Not Hazardous
Stoddard Solvent	Mineral Spirits 66	8052-41-3	46 - 49	Hazardous
Xylene	Xylol	1330-20-7	1 - 3	Hazardous
Ethylbenzene		100-41-4	0.2 – 0.5	Hazardous

4. First-aid measures

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Eye Contact:

Move individual away from exposure. Immediately flush eyes with large quantities of clean water for at least 15 minutes. Get immediate medical attention.

Inhalation:

Remove victim to fresh air. Keep warm and quiet. If not breathing, give artificial respiration. If breathing is difficult, give oxygen by trained personnel. GET IMMEDIATE MEDICAL ATTENTION.

Ingestion:

DO NOT INDUCE VOMITING. ASPIRATION HAZARD. This material may enter the lungs during vomiting. Never give anything by mouth to an unconscious person. GET IMMEDIATE MEDICAL ATTENTION.

5. Firefighting measures

Suitable Extinguishing Media:

Carbon dioxide (CO₂), Foam, Dry chemical, Water spray, Do not use a solid water stream as it may scatter and spread fire.

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide (CO₂).

Fire/Explosion Hazard:

Combustible material. Vapors may form explosive mixtures with air. Flash back possible over considerable distance. Air oxidation of this product may cause it to spontaneously combust. To avoid spontaneous combustion, prevent residue build-up and soak soiled rags, spray-booth filter and over-spray in a closed water-filled metal container. Closed containers may rupture when exposed to extreme heat. Empty containers may retain product residue (liquid and/or vapor). Do not pressurize, cut, weld, braze, solder, drill, grind, or expose these containers to heat, flame, sparks, static electricity, or other sources of ignition as the container may explode and may cause injury or death.

Protective Equipment and Precautions for Firefighters:

Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use. Evacuate all persons from the fire area to a safe location. Move non-burning material, as feasible, to a safe location as soon as possible. Fire fighters should be protected from potential explosion hazard while extinguishing the blaze. DO NOT extinguish a fire resulting from the flow of this combustible liquid until the flow of liquid is effectively shut off. This precaution will help prevent the accumulation of an explosive vapor-air mixture after the initial fire is extinguished. Use water spray to cool fire-exposed containers.

NFPA Rating:**Health 2****Flammability 2****Instability 0****6. Accidental release measures****Personal precautions:**

Depending on extent of release, consider the need for fire fighters/emergency responders with adequate personal protective equipment for cleaning up. Do not eat, drink or smoke while cleaning up. Use a self-contained respirator, a mask with filter or a filtering mask. Wear protective clothing, safety glasses and impervious gloves (e.g., neoprene gloves). Ensure adequate ventilation. Avoid all sources of ignition; hot surfaces and open flames (see also Section 7).

Environmental precautions:

Prevent spills from entering storm sewers or drains and contact with soil.

Methods and materials for containment and cleaning up:

Eliminate all ignition sources. Runoff may create fire or explosion hazard in sewer system. Absorb on fire retardant, liquid-absorbing material (treated sawdust, diatomaceous earth, sand). Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal (see also Section 13).

7. Handling and storage**Precautions for safe handling:**

Avoid contact with eyes. Avoid prolonged repeated skin contact and breathing mists/vapors.

Use in well-ventilated area away from all ignition sources. Switch off all electrical devices such as parabolic heaters, hotplates, storage heaters etc. in good time for them to have cooled down before commencing work. Do not smoke; do not weld. Do not empty waste into sanitary drains. Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage, including incompatibilities:

Keep away from heat, sparks and open flame. - No smoking. Keep containers tightly closed in a dry, cool and well-ventilated place.

8. Exposure controls / personal protection

Information on the system design:

Use general ventilation to maintain airborne concentrations to levels that are below regulatory and recommended occupational exposure limits. Local ventilation may be required during certain operations. Use explosion-proof equipment..

Exposure Limits:

Component Name (CAS-No.)	Reference	TWA		STEL	
		ppm	mg/m3	ppm	mg/m3
Stoddard Solvent (8052-41-3)	ACGIH TLV	100			
	OSHA PEL	500	2900		
	Canada Alberta OEL		572		
	Ontario OEL		525		
	British Columbia OEL		290		580
	NIOSH IDLH				20000
	Mexico OEL	100	523	200	1050
Xylene (1330-20-7)	ACGIH TLV	100		150	
	OSHA PEL	100	434		435
	Canada Alberta OEL	100	434	150	651
	Ontario OEL	100		150	
	British Columbia OEL	100		150	
	Mexico OEL	100	435	150	655
	ACGIH TLV	20			
Ethylbenzene (100-41-4)	OSHA PEL	100	435		
	Canada Alberta OEL	100	434	125	543
	Ontario OEL	100		125	
	British Columbia OEL	20			
	NIOSH IDLH			800	
	Mexico OEL	100	435	125	545

Legend

ACGIH - American Conference of Industrial Hygienists
 IDLH - Immediately Dangerous to Life or Health
 NIOSH - National Institute for Occupational Safety and Health
 OEL - Occupational Exposure Limit
 OSHA - Occupational Safety and Health Administration
 PEL - Permissible Exposure Limit
 STEL - Short Term Exposure Limit
 TWA - Time weighted average

Ventilation:

Use in well-ventilated area with local exhaust.

Respiratory protection:

None required if hazards have been assessed and airborne concentrations are maintained below the exposure limits listed in Section 8. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits. When processing large amounts, use a light duty construction compressed air line breathing apparatus (e.g., in accordance with EN1835), a mask with filter (type A class 3, colour brown) or a filtering half mask (e.g., in accordance with EN

405) when there is inadequate ventilation.

Eye protection:

Safety glasses with side shields or chemical goggles must be worn.

Skin protection:

If prolonged or repeated skin contact is likely, neoprene gloves should be worn. Good personal hygiene practices should always be followed.

9. Physical and chemical properties

Appearance:	Clear Amber
Odor:	Mild Petroleum
Odor Threshold:	Not available
Physical State:	Liquid
pH:	Not applicable
Flash Point:	41°C / 105°F
Flash Point Method:	Seta closed cup
Autoignition Temperature:	260°C / 500°F
Boiling Point/Range:	161 - 198°C / 322 - 388°F
Freezing point:	< -75°C (-103°F)
Flammability Limits in Air	
Lower:	0.8%
Upper:	5.6%
Specific Gravity:	0.905 - 0.920 @ 25°C
Solubility:	Insoluble
Evaporation Rate:	0.18 (BuAc=1)
Vapor Pressure:	2.03 mmHg @ 20°C / 0.27 kPa
Vapor Density:	4.9 (Air = 1)
Percent volatile:	49 - 51 % by weight
VOC Content:	455 g/l (calculated) product as supplied
Viscosity:	5.6 – 11.5 Stokes @ 25°C

10. Stability and reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Keep away from open flames, hot surfaces and sources of ignition. Contamination.

Incompatible Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide (CO₂). Hydrocarbons.

Hazardous Polymerization: Hazardous polymerization does not occur.

11. Toxicological information**Information on likely routes of exposure**

Primary Routes of Entry Skin Contact, Ingestion, Inhalation, Eye contact, Skin absorption

Acute toxicity

Stoddard Solvent

Oral LD50 > 15000 mg/kg (rat)
Dermal LD50 > 3160 mg/kg (rabbit)

Xylene

Oral LD50 = 4300 mg/kg (Rat)
Dermal LD50 > 1700 mg/kg (Rabbit)

Ethylbenzene

Oral LD50 = 3500 mg/kg (Rat)
Dermal LD50 = 15354 mg/kg (Rabbit)

Information on toxicological effects

Symptoms Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Eyes Contact with eyes may cause irritation.

Skin Contact causes skin irritation. Repeated exposure may cause skin dryness or cracking. Can be absorbed through skin.

Inhalation Inhalation of vapors in high concentration may cause irritation of respiratory system.
Inhalation of high vapor concentrations can cause CNS-depression and narcosis.

Ingestion Ingestion (swallowing) may irritate the mouth, throat and stomach. Ingestion is not an anticipated route of exposure for this material in industrial use.

Sensitization No information available.

Repeated dose toxicity Repeated overexposure to xylene via the inhalation route has caused a hearing loss in laboratory animals.

Mutagenic effects No information available.

Carcinogenicity.**Xylene**

ACGIH Group A4 - Not classifiable as a human carcinogen.

Ethylbenzene

ACGIH Group A3-Animal carcinogen.
IARC Group 2B - Possibly Carcinogenic to Humans

Legend

*ACGIH (American Conference of
Governmental Industrial Hygienists) IARC
- International Agency for Research on
Cancer*

Reproductive Toxicity No information available.

Developmental Toxicity High exposures to xylene in some animal studies have been reported to cause health defects on the developing embryo/fetus. These effects were often at levels toxic to the mother. The significance of these findings to humans has not

been determined. Ethyl Benzene has been shown to be fetotoxic in laboratory animals at maternally toxic levels.

Neurological Effects	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Target organ(s)	Central nervous system (CNS), Kidney, Liver, Eyes.
Aspiration Hazard	No information available.
Unknown Acute Toxicity	69.9% of mixture consists of ingredients of unknown toxicity

Test	Results	Basis
Oral Toxicity ATEmix	5083 mg/kg	Chapter 3.1 GHS Doc
Dermal Toxicity ATEmix	2593 mg/kg	Chapter 3.1 GHS Doc
Inhalation Toxicity, Vapor ATEmix	286 mg/l	Chapter 3.1 GHS Doc

12. Ecological information

Ecotoxicity

Stoddard Solvent

Bioconcentration factor (BCF)

Fish

61 - 159 fish

LC50 = 45 mg/L (Pimephales promelas) (96 h) flow-through

LC50 = 2.2 mg/L (Lepomis macrochirus) (96 h) static

LC50 = 2.4 mg/L (Oncorhynchus mykiss) (96 h) static

LC50 = 4720 mg/L 96 h

Water Flea

Xylene

Log Kow

2.77 - 3.15

Bioconcentration factor (BCF)

0.6 - 15

Algae

EC50 = 11 mg/L (Pseudokirchneriella subcapitata) (72h)

Fish

LC50 = 13.4 mg/L (Pimephales promelas) (96 h) flow-through

LC50 2.661 - 4.093 mg/L (Oncorhynchus mykiss) (96 h) static

LC50 13.5 - 17.3 mg/L (Oncorhynchus mykiss) (96 h)

LC50 13.1 - 16.5 mg/L (Lepomis macrochirus) (96 h) flow-through

LC50 = 19 mg/L (Lepomis macrochirus) (96 h)

LC50 7.711 - 9.591 mg/L (Lepomis macrochirus) (96 h) static

LC50 23.53 - 29.97 mg/L (Pimephales promelas) (96 h) static

LC50 = 780 mg/L (Cyprinus carpio) (96 h) semi-static

LC50 > 780 mg/L (Cyprinus carpio) (96 h)

LC50 30.26 - 40.75 mg/L (Poecilia reticulata) (96 h) static

Water Flea

EC50 = 3.82 mg/L 48 h LC50 = 0.6 mg/L 48 h

Ethylbenzene

Log Kow

3.118

Bioconcentration factor (BCF)

15 fish

Algae

EC50 = 4.6 mg/L (Pseudokirchneriella subcapitata) (72h)

EC50 2.6 - 11.3 mg/L (Pseudokirchneriella subcapitata) (72h)

EC50 = 11 mg/L (Pseudokirchneriella subcapitata) (72h)

Fish

LC50 11.0 - 18.0 mg/L (Oncorhynchus mykiss) (96 h) static

LC50 = 4.2 mg/L (Oncorhynchus mykiss) (96 h) semi-static

Water Flea

LC50 7.55 - 11 mg/L (Pimephales promelas) (96 h) flow-through
LC50 = 32 mg/L (Lepomis macrochirus) (96 h) static
LC50 9.1 - 15.6 mg/L (Pimephales promelas) (96 h) static
LC50 = 9.6 mg/L (Poecilia reticulata) (96 h) static
EC50 1.8 - 2.4 mg/L 48 h

Unknown aquatic toxicity

71.2% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability: The total of the organic components contained in the product is not classified as "readily biodegradable" (OECD-301 A-F). However, this product is expected to be inherently biodegradable.

Bio-accumulative potential: There is no evidence to suggest bioaccumulation will occur.

Mobility: Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

Other adverse effects: No information available

13. Disposal considerations

Waste Disposal Method: Hazardous waste. Can be incinerated, when in compliance with local regulations.

Contaminated Packaging: Empty containers should be taken for local recycling, recovery or waste disposal.

US EPA Waste Number: D001 (IGNITABLE): When discarded in its purchased form, this material would be regulated under 40 CFR 261.21 as EPA Hazardous Waste Number D001 based on the characteristic of ignitability.

14. Transport information**DOT**

UN-No UN1866
Proper Shipping Name HOT RESIN SOLUTION
Hazard Class 3
Packing Group III
NAERG: 127

DOT Exemption: This material has a flash point at or above 38°C and may be re-classed as a combustible liquid. A combustible liquid in a non-bulk package (<119 gallons) is exempt from the Hazardous Material Regulations unless shipped by vessel or aircraft. Reference 49 CFR 173.150(f).

TDG

UN-No UN3256
Proper Shipping Name ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S.
Hazard Class CLASS 3
Packing Group PG III
NAERG: 127

TDG Exemption: This material has a flash point above 37.8°C and is exempt from the Transportation of Dangerous Goods (TDG) regulations when packaged in a small means of

containment (less than or equal to 450 liters) and shipped within Canada. Reference TDG Section 1.33.

IATA

UN-No UN1866
Proper Shipping Name RESIN SOLUTION
Hazard Class 3
Packing Group III
Packing Instructions 309, 310
NAERG: 127

IMDG/IMO

UN-No UN1866
Proper Shipping Name RESIN SOLUTION
Hazard Class CLASS 3
Packing Group PG III
EmS No. F-E, S-E
NAERG: 127

15. Regulatory information

International Inventories

TSCA Inventory Status: All components of this material are listed on the US Toxic Substances Control Act (TSCA) inventory

Canadian Inventory Status: All components of this material are listed on the Canadian Domestic Substances List (DSL)

Australian Inventory Status: This product contains only chemicals which are currently listed on the Australian Inventory of Chemical Substances

Korean Inventory Status: This product contains only chemicals which are currently listed on the Korean Chemical Substances List

Philippine Inventory: All components of this material are listed on or are exempt from the Philippine Inventory of Chemicals and Chemical Substances

Japan ENCS: This product contains one or more chemicals currently not on the Japanese Inventory of Existing and New Chemical Substances

Chinese IECS: This product contains only chemicals that are currently listed on the Chinese Inventory of Existing Chemical Substances

New Zealand Inventory: This product contains only chemicals which are currently listed on the New Zealand Inventory of Chemicals

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Component	CAS No	Weight-%	SARA 313 Status
Xylene	1330-20-7	1 - 3	Listed
Ethylbenzene	100-41-4	0.2 - 0.5	Listed

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

TSCA 12(b) - Export Notification:

This material does not contain any components that are subject to the US Toxic Substances Control Act (TSCA) Section 12(b) Export Notification requirements.

Clean Water Act

This product contains the following listed substances:

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority	CWA - Hazard
Xylene 1330-20-	100 lb			Listed
Ethylbenzene 100-41-4	1000 lb	Listed	X	Listed

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains following HAPs.

Component	CAS No	Weight-%	HAPS Data
Xylene	1330-20-7	1 - 3	Listed
Ethylbenzene	100-41-4	0.2 - 0.5	Listed

CERCLA

This product contains the following reportable quantities:

Component	40 CFR 302.4 RQ	40 CFR 355 EHS TPQs
Xylene	100 lb, 45.4 kg	
Ethylbenzene	1000 lb, 454 kg	

State Regulations**California Proposition 65**

WARNING: This material contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. The California Safe Drinking Water and Toxic Enforcement Act of 1986 requires that clear and reasonable warning be given prior to exposing any person to this chemical.

Canada

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. Other information

Prepared by:	A. Neymark
SDS Preparation date:	March 2, 2018
Version:	2.1
Former Date:	06/10/2015

The information contained herein is accurate to the best of our knowledge. Deltech Resin Company makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances.

End of SDS