



SAFETY DATA SHEET

Revision Date 02-Jun-2015

Version 1

1. IDENTIFICATION

Product identifier

Product Name 21425 FAST CURE EPOXY PART 2

Other means of identification

Product Code 150445E

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Epoxy curing agent

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

ITW Permatex
10 Columbus Blvd.
Hartford, CT 06106 USA

Distributor

ITW Permatex Canada
35 Brownridge Road, Unit 1
Halton Hills, ON Canada L7G 0C6
Telephone: (800) 924-6994

Company Phone Number 1-87-Permatex
(877) 376-2839

24 Hour Emergency Phone Number Chem-Tel: 800-255-3924
International Emergency:
00+1+ 813-248-0585
Contract Number: MIS0003453

E-mail address mail@permatex.com

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

NOTE: This product is a consumer product and is labeled in accordance with the US Consumer Product Safety Commission regulations which take precedence over OSHA Hazard Communication labeling. The actual container label will not include the label elements below. The labeling below applies to industrial/professional products.

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity (repeated exposure)	Category 1

Label elements

Emergency Overview

Danger

Causes skin irritation
Causes serious eye irritation
Suspected of causing cancer

Suspected of damaging fertility or the unborn child
Causes damage to organs through prolonged or repeated exposure



Appearance Black

Physical state Viscous liquid

Odor Mercaptan

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Wash face, hands and any exposed skin thoroughly after handling
Wear eye/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see supplemental first aid instructions on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

- Toxic to aquatic life with long lasting effects

Unknown acute toxicity

35.405 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

substance(s)

Chemical Name	CAS No	Weight-%	Trade Secret
ALUMINUM HYDROXIDE	21645-51-2	30 - 60	*
POLYMERCAPTAN CURING AGENT (TSRN 679485-5016p)	—	15 - 40	*
BENZYL ALCOHOL	100-51-6	5 - 10	*
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	90-72-2	5 - 10	*
STYRENE	100-42-5	1 - 5	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General advice	Get medical advice/attention if you feel unwell.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin contact	IF ON SKIN: Wash skin with soap and water. If skin irritation persists, call a physician. Wash contaminated clothing before reuse.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.
Ingestion	IF SWALLOWED: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician.
Self-protection of the first aider	Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

Most important symptoms and effects, both acute and delayed

Symptoms See section 2 for more information.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂), Dry chemical, Foam

Unsuitable extinguishing media

None.

Specific hazards arising from the chemical

None in particular.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas. Avoid contact with eyes and skin. Use personal protective equipment as required.

Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Ensure adequate ventilation. Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Use personal protective equipment as required.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Store locked up.
Incompatible materials	Strong oxidizing agents, Acids, Peroxides, Sodium hypochlorite, Calcium hypochlorite, Reactive metals

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
ALUMINUM HYDROXIDE 21645-51-2	TWA: 1 mg/m ³ respirable fraction	-	-
STYRENE 100-42-5	STEL: 40 ppm TWA: 20 ppm	TWA: 100 ppm (vacated) TWA: 50 ppm (vacated) TWA: 215 mg/m ³ (vacated) STEL: 100 ppm (vacated) STEL: 425 mg/m ³ Ceiling: 200 ppm	IDLH: 700 ppm TWA: 50 ppm TWA: 215 mg/m ³ STEL: 100 ppm STEL: 425 mg/m ³

NIOSH IDLH Immediately Dangerous to Life or Health

Other Information	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
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Appropriate engineering controls

Engineering Controls	Showers Eyewash stations Ventilation systems
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Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear protective gloves and protective clothing.
Respiratory protection	Use NIOSH-approved air-purifying respirator with organic vapor cartridge or canister, as appropriate.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Viscous liquid
Appearance	Black
Odor	Mercaptan
Odor threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	No information available	
Boiling point / boiling range	> 149 °C / 300 °F	
Flash point	> 93 °C / > 200 °F	
Evaporation rate	< 1	Butyl acetate = 1
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	<5 mm Hg @ 77°F	
Vapor density	>1	Air = 1
Relative density	1.4	
Water solubility	Slightly soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	3%
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY**Reactivity**

No data available

Chemical stability

Stable under recommended storage conditions

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Excessive heat.

Incompatible materials

Strong oxidizing agents, Acids, Peroxides, Sodium hypochlorite, Calcium hypochlorite, Reactive metals

Hazardous Decomposition Products

Carbon oxides

Nitrogen oxides (NO_x)

Amines

Ammonia

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Harmful by inhalation.
Eye contact	Contact with eyes may cause irritation. May cause redness and tearing of the eyes.
Skin contact	May cause skin irritation and/or dermatitis.
Ingestion	Ingestion may cause irritation to mucous membranes.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
ALUMINUM HYDROXIDE 21645-51-2	> 5000 mg/kg (Rat)	-	-
BENZYL ALCOHOL 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
2,4,6-TRIS(DIMETHYLAMINOMET HYL)PHENOL 90-72-2	= 1000 mg/kg (Rat)	= 1280 mg/kg (Rat)	-
STYRENE 100-42-5	= 1000 mg/kg (Rat)	-	= 11.7 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms No information available.

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

Sensitization No information available.

Germ cell mutagenicity No information available.

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

Chemical Name	ACGIH	IARC	NTP	OSHA
STYRENE 100-42-5	-	Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Chronic toxicity May cause adverse liver effects. Contains a known or suspected reproductive toxin.

Target Organ Effects Central nervous system, Eyes, Liver, Reproductive System, Respiratory system, Skin.

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 2458 mg/kg

ATEmix (dermal) 6461 mg/kg

ATEmix (inhalation-dust/mist) 8.9 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

88.93 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea
BENZYL ALCOHOL 100-51-6	35: 3 h Anabaena variabilis mg/L EC50	460: 96 h Pimephales promelas mg/L LC50 static 10: 96 h Lepomis macrochirus mg/L LC50 static	23: 48 h water flea mg/L EC50
STYRENE 100-42-5	1.4: 72 h Pseudokirchneriella subcapitata mg/L EC50 0.72: 96 h Pseudokirchneriella subcapitata mg/L EC50 0.15 - 3.2: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 0.46 - 4.3: 72 h Pseudokirchneriella subcapitata	3.24 - 4.99: 96 h Pimephales promelas mg/L LC50 flow-through 19.03 - 33.53: 96 h Lepomis macrochirus mg/L LC50 static 58.75 - 95.32: 96 h Poecilia reticulata mg/L LC50 static 6.75 - 14.5: 96 h Pimephales promelas mg/L LC50	3.3 - 7.4: 48 h Daphnia magna mg/L EC50

	mg/L EC50 static	static	
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Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility

No information available.

Chemical Name	Partition coefficient
BENZYL ALCOHOL 100-51-6	1.1
STYRENE 100-42-5	2.95

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

- Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.
- Contaminated packaging** Do not reuse container.
- US EPA Waste Number** Not applicable

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
STYRENE 100-42-5	Toxic Ignitable

14. TRANSPORT INFORMATION

DOT

- UN/ID no** 2735
- Proper shipping name:** Amines, liquid, corrosive, n.o.s, (2,4,6-tris(dimethylaminomethyl)phenol), Limited Quantity (LQ)
- Hazard Class** 8
- Packing Group** III
- Emergency Response Guide Number** 153

IATA

- UN/ID no** ID 8000
- Proper shipping name:** Consumer commodity
- Hazard Class** 9
- ERG Code** 9L

IMDG

- UN/ID no** 2735
- Proper shipping name:** Amines, liquid, corrosive, n.o.s, (2,4,6-tris(dimethylaminomethyl)phenol), Limited Quantity (LQ)
- Hazard Class** 8

Packing Group III
 EmS-No F-A, S-B

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
 DSL/NDSL Complies
 EINECS/ELINCS Not determined
 ENCS Not determined
 IECSC Not determined
 KECL Not determined
 PICCS Not determined
 AICS Not determined

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances
 AICS - Australian Inventory of Chemical Substances

US 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

Chemical Name	SARA 313 - Threshold Values %
STYRENE - 100-42-5	0.1

SARA 311/312 Hazard Categories

Acute health hazard Yes
 Chronic Health Hazard Yes
 Fire hazard No
 Sudden release of pressure hazard No
 Reactive Hazard No

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
STYRENE 100-42-5	1000 lb	-	-	X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
STYRENE 100-42-5	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
CARBON BLACK - 1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
STYRENE 100-42-5	X	X	X
CARBON BLACK 1333-86-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

WHMIS Hazard Class

D2A - Very toxic materials

NFPA

Health hazards 2

Flammability 1

Instability 0

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HMIS

Health hazards 2

Flammability 1

Physical hazards 0

Personal protection B

NFPA (National Fire Protection Association)

HMIS (Hazardous Material Information System)

Revision Date

02-Jun-2015

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet