

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 11/01/2019 Revision date: 11/01/2019 Version: 6.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : Epic S7136B
Product code : S7136B

1.2. Recommended use and restrictions on use

Recommended use : Adhesives, sealants
Restrictions on use : Adhesives, sealants

1.3. Supplier

Epic Resins 600 Industrial Blvd. Palmyra, WI 53156 - USA T 800-242-6649 www.epicresins.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 800-424-9300

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute toxicity (oral), Category 4
Skin corrosion/irritation, Category 1B

Serious eye damage/eye irritation, Category 1 Skin sensitisation, Category 1

Skin sensitisation, Category 1
Reproductive toxicity, Category 1B

Hazardous to the aquatic environment — Acute Hazard, Category 3 Hazardous to the aquatic environment — Chronic Hazard, Category 3

Acute toxicity (dermal), Category 4

Full text of H statements : see section 16

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

H360 May damage fertility or the unborn child.

H402 Harmful to aquatic life

H412 Harmful to aquatic life with long lasting effects.

H312 Harmful in contact with skin.

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)







Signal word (GHS US) : Danger

Hazard statements (GHS US) : H302+H312 - Harmful if swallowed or in contact with skin

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage.

H360 - May damage fertility or the unborn child.

H402 - Harmful to aquatic life

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements (GHS US) : P201 - Obtain special instructions before use.

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

P260 - Do not breathe dust, fume, mist, spray, vapours. P261 - Avoid breathing dust, fume, gas, mist, vapours, spray.

P264 - Wash hands, forearms, face and clothing thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P272 - Contaminated work clothing must not be allowed out of the workplace

P273 - Avoid release to the environment.

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

P301+P312 - If swallowed: Call a poison center and/or doctor if you feel unwell P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting

P302+P352 - If on skin: Wash with plenty of soap and water.

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

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skin with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

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

P312 - Call a poison center or doctor if you feel unwell

P330 - Rinse mouth.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse.

P405 - Store locked up.

P501 - Contact a local certified and licensed waste disposal contractor or collection site to ensure proper and legal disposal.

Other hazards which do not result in classification

No additional information available

Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

Substances

Not applicable

3.2. **Mixtures**

Name	Product identifier	%	GHS-US classification
Triethylenetetramine	(CAS-No.) 112-24-3	100	Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Dermal), H312 Skin Corr. 1B, H314 Skin Sens. 1, H317 Aquatic Acute 3, H402 Aquatic Chronic 3, H412 Repr. 1B, H360

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. **Description of first aid measures**

: Call a physician immediately. First-aid measures general

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician First-aid measures after skin contact

immediately.

First-aid measures after eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing. Call a physician immediately.

: Rinse mouth. Do not induce vomiting. Call a physician immediately. First-aid measures after ingestion

Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Specific hazards arising from the chemical 5.2.

No additional information available

Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Do not handle until all safety precautions have been read and understood. Avoid contact with skin and eyes. Absorb spillage to prevent material damage. Clean up any spills as soon as possible, using an absorbent material to collect it.

6.1.1. For non-emergency personnel

Protective equipment

: Avoid contact with skin and eyes; wear chemical protective clothing, eye protection and chemical resistant gloves.

Emergency procedures

: Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust, fume, mist, spray, vapours. Avoid contact with skin, eyes and clothing. Do not breathe vapours.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment

: Collect spillage.

Methods for cleaning up

: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

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Other information : Dispose of materials or solid residues at a certified/authorized waste disposal site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Industrial Hygiene/Ventilation Safe Practices: Epic Resins urges prevention of skin, eye and respirable contact with this material. Since spraying and heating applications increase the potential for skin, eye and respirable exposures, stringent precautions must be taken to ensure the safety of the person(s) involved with these types of applications as well as other persons working in the area. Ventilation of at minimum of 10 air exchanges per hour is recommended. if ventilation is questionable, contact a local licensed HVAC Specialist and Certified Industrial Hygienist. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not breathe dust, fume, mist, spray, vapours.

Hygiene measures

Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

Maximum storage period : 12 months Storage temperature : 25 $^{\circ}$ C

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Epic S7136B

No additional information available

Triethylenetetramine (112-24-3)

No additional information available

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8.2. Appropriate engineering controls

Appropriate engineering controls

: Industrial Hygiene/Ventilation Safe Practices: Epic Resins urges prevention of skin, eye and respirable contact with this material. Since spraying and heating applications increase the potential for skin, eye and respirable exposures, stringent precautions must be taken to ensure the safety of the person(s) involved with these types of applications as well as other persons working in the area. Ventilation of at minimum of 10 air exchanges per hour is recommended. if ventilation is questionable, contact a local licensed HVAC Specialist and Certified Industrial Hygienist.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Protective clothing. Face shield. Gloves. Safety glasses.

Materials for protective clothing:

synthetic material. neoprene/butyl rubber. nitrile rubber/PVC

Hand protection:

Chemical Resistant Protective Gloves. Ensure gloves remain in good condition during use and replace if any deterioration is observed. Gloves should be worn, Nitrile rubber gloves, Butyl rubber gloves, Neoprene gloves

Eye protection:

Safety glasses. When splashing may occur, face shield must be worn. Wear security safety glasses or face shield that protects from splashes. When directly handling liquid product, eye protection is required. Examples of eye protection include a chemical safety goggle, or chemical safety goggle in combination with a full face shield when there is a greater risk of splash.

. Wear security glasses which protect from splashes

Skin and body protection:

Wear suitable protective clothing. Long sleeved protective clothing. Chemical resistant apron. Chemical resistant safety shoes. Head/neck protection

Respiratory protection:

If ventilation is questionable, consult with a certified Industrial Hygienist and HVAC specialist. In case of insufficient ventilation, wear suitable certified respiratory equipment per OSHA 29 CFR 1910.134 standard.

Personal protective equipment symbol(s):









SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Colour : Colourless
Odour : Ammonia odour
Odour threshold : No data available

pH : Alkaline

Melting point : Not applicable

Freezing point : No data available

Boiling point : $277 \, ^{\circ}\text{C}$ Flash point : $> 115 \, ^{\circ}\text{C}$

Relative evaporation rate (butylacetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapour pressure : < 0.0133 hPa(a) Relative vapour density at 20 °C : No data available

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Relative density : 5.61

Density : 1.03 g/cm³ (1.03 g/ml) Solubility : No data available : No data available Log Pow : No data available Auto-ignition temperature Decomposition temperature : No data available Viscosity, kinematic : No data available : No data available Viscosity, dynamic **Explosive limits** : No data available Explosive properties : No data available Oxidising properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Harmful in contact with skin.

Acute toxicity (inhalation) : Not classified

ATE US (oral)	500 mg/kg bodyweight
ATE US (dermal)	1100 mg/kg bodyweight

Triethylenetetramine (112-24-3)		
LD50 oral rat	2500 mg/kg (Rat, Literature, Oral)	
LD50 dermal rabbit	805 mg/kg (Rabbit, Literature, Dermal)	
ATE US (oral)	500 mg/kg bodyweight	
ATE US (dermal)	805 mg/kg bodyweight	

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: Alkaline

Serious eye damage/irritation : Causes serious eye damage.

pH: Alkaline

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

Reproductive toxicity : May damage fertility or the unborn child.

STOT-single exposure : Not classified STOT-repeated exposure : Not classified

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: Not classified Aspiration hazard Viscosity, kinematic : No data available

Symptoms/effects after skin contact : Burns. May cause an allergic skin reaction.

Symptoms/effects after eye contact Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

SECTION 12: Ecological information

Toxicity

: Harmful to aquatic life with long lasting effects. Harmful to aquatic life. Ecology - general

Triethylenetetramine (112-24-3)			
LC50 fish 1	495 mg/l (96 h, Pimephales promelas, Fresh water, Literature study)		
EC50 Daphnia 1	31.1 mg/l (Equivalent or similar to OECD 202, 48 h, Daphnia magna, Literature study)		
ErC50 (algae)	>= 100 mg/l (DIN 38412-9, 72 h, Scenedesmus subspicatus, Literature study, Growth)		

12.2. Persistence and degradability

Triethylenetetramine (112-24-3)		
Persistence and degradability	Not readily biodegradable in water.	

12.3. **Bioaccumulative potential**

Triethylenetetramine (112-24-3)		
BCF other aquatic organisms 1	3.162 (BCFBAF v3.01, Calculated value)	
Log Pow	-2.65 (Estimated value, KOWWIN)	
Bioaccumulative potential	Not bioaccumulative.	

Mobility in soil 12.4.

Triethylenetetramine (112-24-3)		
Log Koc	1.885 (log Koc, SRC PCKOCWIN v2.0, Calculated value)	
Ecology - soil	Highly mobile in soil.	

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Disposal methods

Waste treatment methods

: When handling waste, the safety precautions applying to handling of the product should be considered. Waste, residues, empty containers, discarded work clothes and contaminated cleaning material should be collected in designated containers, labeled with their contents. Dispose of surplus products and those that cannot be recycled via local licensed waste disposal contractor. Disposal of this product, process solutions, residues and by-products should at all times comply with state and federal waste disposal legislation any other local authority requirements. Do not cut or weld used containers unless they have been thoroughly

cleaned and inspected for safe use.

Product/Packaging disposal recommendations

Recommendations for disposal within the US Lower 48 States is available by contacting the Supplier.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2259 Triethylenetetramine, 8, II

UN-No.(DOT) UN2259

Proper Shipping Name (DOT) Triethylenetetramine

Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Packing group (DOT) : II - Medium Danger

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Hazard labels (DOT) : 8 - Corrosive



DOT Packaging Non Bulk (49 CFR 173.xxx) : 202 DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Special Provisions (49 CFR 172.102) : B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are

not authorized.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

T7 - 4 178.274(d)(2) Normal..... 178.275(d)(3)

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

DOT Vessel Stowage Location

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

DOT Vessel Stowage Other : 40 - Stow "clear of living quarters",52 - Stow "separated from" acids

Other information : No supplementary information available.

Transportation of Dangerous Goods

Transport by sea

Transport document description (IMDG) : UN 2259 TRIETHYLENETETRAMINE, 8, II

UN-No. (IMDG) : 2259

Proper Shipping Name (IMDG) : TRIETHYLENETETRAMINE
Class (IMDG) : 8 - Corrosive substances

Packing group (IMDG) : II - substances presenting medium danger

Air transport

Transport document description (IATA) : UN 2259 Triethylenetetramine, 8, II

UN-No. (IATA) : 2259

Proper Shipping Name (IATA) : Triethylenetetramine
Class (IATA) : 8 - Corrosives
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

International regulations

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CANADA WHMIS D-2B

Triethylenetetramine (112-24-3)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

National regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Triethylenetetramine(112-24-3)	U.S New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

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Full text of H-statements:

411	tox of 11 statements.				
	H302	Harmful if swallowed.			
	H312	Harmful in contact with skin.			
	H314	Causes severe skin burns and eye damage.			
	H317	May cause an allergic skin reaction.			
	H318	Causes serious eye damage.			
	H360	May damage fertility or the unborn child.			
	H402	Harmful to aquatic life			
	H412	Harmful to aquatic life with long lasting effects.			

Hazard Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

given

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids,

solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high

temperatures and pressures. Materials may react non-violently with water or undergo

hazardous polymerization in the absence of inhibitors.

Personal protection : D,X

D - Face shield and eye protection, Gloves, Synthetic apron

X - Special handling directions

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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