

# SAFETY DATA SHEET

Version: 3.1  
Date of Issue: 3 August 2021  
Date of First Issue: 20 March 2012

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ACCORDING TO OSHA HCS (29 CFR 1910.1200)

## SECTION 1: IDENTIFICATION

<b>Product identifier used on the label</b>	M-Bond Curing Agent – Type 10	
<b>Other means of identification</b>	Not applicable	
<b>Recommended use of the chemical and restrictions on use</b>		
Recommended use	Adhesives.	
Restrictions on use	For professional users only. Anything other than the above.	
<b>Details of the supplier of the safety data sheet</b>		
Supplier	VISHAY MEASUREMENTS GROUP, INC.	
Address of Supplier	Post Office Box 27777 Raleigh, NC 27611 USA	
Telephone	+1 919-365-3800	
Fax	+1 919-365-3945	
E-Mail (competent person)	<a href="mailto:mm.us@vpgsensors.com">mm.us@vpgsensors.com</a>	
<b>Emergency telephone number</b>	1-800-424-9300	CHEMTREC (24 hours)

## SECTION 2: HAZARD(S) IDENTIFICATION

**Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200**

**Physical hazards**

Health hazards

Acute toxicity (dermal), Category 4  
Skin Corrosion/Irritation, Category 1B  
Skin Sensitisation, Category 1  
Eye Damage, Category 1  
Reproductive toxicity, Category 1B  
Specific target organ toxicity — repeated exposure, Category 1  
Hazardous to the aquatic environment, Chronic, Category 3

Environmental hazards

Hazard Symbol



Signal Word(s)

DANGER

Hazard Statement(s)

Harmful in contact with skin.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye damage.  
May damage fertility or the unborn child.  
Causes damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life with long lasting effects.

Precautionary Statement(s)

Prevention Wear protective gloves/protective clothing/eye protection/face protection.  
Use only outdoors or in a well-ventilated area.  
Wash hands and exposed skin thoroughly after handling.  
Do not breathe vapour.  
Do not eat, drink or smoke when using this product.

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Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response IF exposed: Call a POISON CENTER or doctor/physician.  
 IF ON SKIN or hair: Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 If skin irritation occurs: Get medical advice/attention.  
 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 INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
 Call a POISON CENTER/doctor if you feel unwell.  
 Wash contaminated clothing before reuse.  
 Contaminated work clothing should not be allowed out of the workplace.

Storage Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Disposal Dispose of contents in accordance with local, state or national legislation.

Other hazards None known.

Percent of the mixture consists of ingredient(s) of unknown acute toxicity: Not applicable – mixture not classified as Acutely Toxic

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances Not applicable

Mixtures Substances in preparations / mixtures

Chemical identity of the substance	%W/W	Synonym(s)	CAS No.	Hazard classification
Triethylenetetramine (TETA) Synonyms: 3,6-diazaoctanethylenediamin	> 90	Trientine	112-24-3	Acute toxicity (dermal), Category 4 Skin corrosion/irritation, Category 1B Skin sensitization, Category 1 Eye Damage/Irritation, Category 1 Hazardous to the aquatic environment, Chronic, Category 3
2-(2-Aminoethylamino)ethanol (AEEA)	< 2	2-(2-aminoethylamino)ethanol	111-41-1	Skin corrosion/irritation, Category 1B Skin sensitization, Category 1 Eye Damage/Irritation, Category 1 Specific target organ toxicity — single exposure, Category 3 (Respiratory tract) Reproductive toxicity, Category 1B
2-Piperazin-1-ylethylamine	< 2	1-(2-Aminoethyl) piperazine	140-31-8	Acute toxicity (oral), Category 4 Acute toxicity (dermal), Category 3 Skin corrosion/irritation, Category 1B Skin sensitization, Category 1 Eye Damage/Irritation, Category 1 Reproductive toxicity, Category 2 Specific target organ toxicity — repeated exposure, Category 1 Hazardous to the aquatic environment, Chronic, Category 3
Tetraethylenepentamine (TEPA) Synonym: 3,6,9-Triazaundecamethylenediamine	< 2	3,6,9-triazaundecamethylenediamine	112-57-2	Acute toxicity (oral), Category 4 Acute toxicity (dermal), Category 4 Skin Corrosion/Irritation, Category 1A Skin Sensitisation, Category 1 Eye Damage, Category 1

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				Hazardous to the aquatic environment, Chronic, Category 2
Diethylenetriamine (DETA)	< 1	2,2'-iminodi(ethylamine)	111-40-0	Acute toxicity (oral), Category 4 Acute toxicity (dermal), Category 4 Skin Corrosion/Irritation, Category 1B Skin Sensitisation, Category 1 Eye Damage, Category 1 Acute toxicity (inhalative), Category 2 Specific target organ toxicity — single exposure, Category 3 (Respiratory tract)

## SECTION 4: FIRST AID MEASURES



### Description of first aid measures

Self-protection of the first aider

Use personal protective equipment as required. Wear appropriate personal protective equipment, avoid direct contact. Ensure adequate ventilation. [In case of inadequate ventilation] wear respiratory protection. Do not breathe vapour. Avoid all contact. Contaminated clothing should be laundered before reuse. Avoid contact during pregnancy/while nursing.

Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. Immediately call a POISON CENTER/doctor. Apply artificial respiration only if patient is not breathing but do not use mouth to mouth resuscitation.

Skin Contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Continue irrigation until medical attention can be obtained. Immediately call a POISON CENTER/doctor.

Eye Contact

IF IN EYES: Flush eyes with water for at least 15 minutes while holding eyelids open. Immediately call a POISON CENTER/doctor. Continue irrigation until medical attention can be obtained. Treatment by an ophthalmologist due to possible caustic burn of the eyes may be required.

Ingestion

IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Continue irrigation until medical attention can be obtained. Do NOT induce vomiting.

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

Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.

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

Treat symptomatically.

## SECTION 5: FIRE-FIGHTING MEASURES

### Extinguishing media

Suitable Extinguishing Media

Extinguish with carbon dioxide, dry chemical, foam or waterspray.

Unsuitable extinguishing Media

Do not use water jet.

### Special hazards arising from the substance or mixture

Not flammable. Reacts with metals liberating hydrogen. Reaction products may include hydrogen cyanide. May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide. May react with some metals including aluminum, magnesium, and zinc, resulting in evolution of phosphorus oxides.

### Special protective equipment and precautions for fire fighters

Fight fire with normal precautions from a reasonable distance. Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Keep containers cool by spraying with water if exposed to fire. Avoid release to the environment.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Stop leak if safe to do so. Use personal protective equipment as required. See Section: 8. Do not breathe vapour. Avoid all contact. Contaminated clothing should be laundered before reuse. Avoid contact during pregnancy/while nursing.

**Environmental precautions**

Avoid release to the environment. Do not release undiluted and unneutralised to the sewer. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

**Methods and material for containment and cleaning up**

Absorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Cautiously neutralize remainder. Then wash away with plenty of water. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste

## SECTION 7: HANDLING AND STORAGE

**Precautions for safe handling**

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Ensure operatives are trained to minimise exposures. Avoid all contact. Do not breathe vapour. Avoid contact during pregnancy/while nursing. Ensure adequate ventilation. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.

**Conditions for safe storage, including any incompatibilities**

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep away from heat, sources of ignition and direct sunlight.

Storage temperature

Ambient. 5 - 25°C

Storage life

Stable under normal conditions.

Incompatible materials

Copper, Aluminium, or Brass. Keep away from: Oxidizing agents and Acids. May be corrosive to metals. (Aluminium, Copper and Zinc).

**Specific end use(s)**

Adhesives.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Occupational Exposure Limits**

No OSHA permissible exposure limit (PEL).

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
2,2'-Iminodi(ethylamine)	111-40-0	1	4	-	-	NIOSH Skin
		1	-	-	-	ACGIH Skin

**Source(s):**

ACGIH: American Conference of Governmental Industrial Hygienists - Threshold limit values (TLV) 2017.

NIOSH: National Institute for Occupational Safety and Health (NIOSH) Recommended exposure limits (RELs).

**Notes:**

Skin: Danger of cutaneous absorption (skin, mucous membranes and eyes) by contact with vapors, liquids and solids

**Biological Exposure Indices**

Not established

**Appropriate engineering controls**

Ensure operatives are trained to minimise exposures. Ensure adequate ventilation. or Use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit. Guarantee that the eye flushing systems and safety showers are located close to the working place.

**Individual protection measures, such as personal protective equipment (PPE)**

General hygiene measures for the handling of chemicals are applicable. Keep good industrial hygiene. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place.

Eye/face protection

Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection (EN166).

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Skin protection



Respiratory protection



#### Hand protection:

Wear impervious gloves (EN374). Protective index 6, corresponding > 480 minutes of permeation time according to EN 374. Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. Neoprene or rubber gloves are recommended. Recommended: Polychloroprene - CR (Minimum thickness; 0.5mm), Nitrile rubber (Minimum thickness; 0.4mm)

#### Body protection:

Wear impervious protective clothing, including boots, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

In case of inadequate ventilation wear respiratory protection. Open system(s): Wear suitable respiratory protective equipment. A suitable mask with filter type A (EN141 or EN405) may be appropriate.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

Appearance	Yellow Coloured liquid.
Odor	Amine-like Odour
Odor Threshold	Not available.
pH	Not established.
Melting Point/Freezing Point	Not established.
Initial boiling point and boiling range	277°C
Flash Point	148°C [Closed cup]
Evaporation rate (Butyl acetate = 1)	2.83 (BuAc = 1)
Flammability (solid, gas)	Not applicable - Liquid
Upper/lower flammability or explosive limits	Flammable Limits (Lower) (%v/v): 1 @ 185°C Flammable Limits (Upper) (%v/v): >6.4 @ 185°C
Vapour pressure	<1 kPa at 20°C
Vapour density	5 (Air = 1)
Relative density	0.98 g/cm <sup>3</sup> (H <sub>2</sub> O = 1)
Solubility(ies)	100% (Water)
Partition coefficient: n-octanol/water	0.05 log Pow (25 °C)
Auto-ignition temperature	399 °C
Decomposition Temperature	Not available.
Viscosity	2.038 mPa s (dynamic) 25 °C

### Additional parameters

Evaporation rate	2.83 (BuAc = 1)
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

## SECTION 10: STABILITY AND REACTIVITY

### Reactivity

Stable under normal conditions.

### Chemical stability

Stable under normal conditions.

### Possibility of hazardous reactions

Hazardous polymerisation will not occur.

### Conditions to avoid

Keep away from heat, sources of ignition and direct sunlight.

### Incompatible materials

Keep away from: Oxidizing agents and Acids. May be corrosive to metals. (Aluminium, Copper and Zinc).

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## Hazardous decomposition product(s)

Decomposes in a fire giving off toxic fumes: Nitrogen oxides, Carbon monoxide and Carbon dioxide.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on toxicological effects (Substances in preparations / mixtures)

#### Acute toxicity - Ingestion

Mixture: Based upon the available data, the classification criteria are not met.  
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.

#### Acute toxicity - Inhalation

Mixture: Based upon the available data, the classification criteria are not met.  
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >20.0 mg/l.

#### Acute toxicity - Skin Contact

Mixture: Acute toxicity (dermal), Category 4; Harmful in contact with skin.  
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 >1000 - ≤2000 mg/kg bw/day.

#### Triethylenetetramine (TETA)

Acute toxicity (dermal), Category 4; Harmful in contact with skin.  
EU Harmonised Classification

#### 2-Piperazin-1-ylethylamine

Acute toxicity (dermal), Category 3; Toxic in contact with skin.  
LD50 (rabbit, male): 8.66 mg/kg bw (Smyth et al, 1962)

#### Tetraethylenepentamine (TEPA)

Acute toxicity (dermal), Category 4; Harmful in contact with skin  
EU Harmonised Classification

#### Diethylenetriamine (DETA)

Acute toxicity (dermal), Category 4; Harmful in contact with skin  
LD50 (rabbit): 1.09 mL/kg bw (Unnamed publication. 1948)

#### Skin corrosion/irritation

Mixture: Skin corrosion/irritation, Category 1B; Causes severe skin burns and eye damage.

#### Triethylenetetramine (TETA)

Skin corrosion/irritation, Category 1A; Causes severe skin burns and eye damage.  
EU Harmonised Classification

#### 2-(2-Aminoethylamino)ethanol (AEEA)

Skin corrosion/irritation, Category 1B; Causes severe skin burns and eye damage.

#### 2-Piperazin-1-ylethylamine

Corrosive to skin. (rabbit) (OECD 404)  
Skin corrosion/irritation, Category 1B; Causes severe skin burns and eye damage.  
EU Harmonised Classification

#### Tetraethylenepentamine (TEPA)

Skin corrosion/irritation, Category 1B; Causes severe skin burns and eye damage.  
EU Harmonised Classification

#### Diethylenetriamine (DETA)

Skin corrosion/irritation, Category 1B; Causes severe skin burns and eye damage.  
Causes skin necrosis. (rabbit) (Unnamed publication. 1957)

#### Serious eye damage/irritation

Mixture: Eye Damage/Irritation, Category 1; Causes serious eye damage.

#### Triethylenetetramine (TETA)

Eye Damage/Irritation, Category 1; Causes serious eye damage.  
EU Harmonised Classification

#### 2-(2-Aminoethylamino)ethanol (AEEA)

Eye Damage/Irritation, Category 1; Causes serious eye damage.

#### 2-Piperazin-1-ylethylamine

Causes serious eye damage. (rabbit) (Unnamed publication. 1958)  
Eye Damage/Irritation, Category 1; Causes serious eye damage.  
EU Harmonised Classification

#### Tetraethylenepentamine (TEPA)

Eye Damage/Irritation, Category 1; Causes serious eye damage.  
EU Harmonised Classification

#### Diethylenetriamine (DETA)

Eye Damage/Irritation, Category 1; Causes serious eye damage.  
Causes serious eye damage. (rabbit) (Unnamed publication. 1970)

#### Respiratory or skin sensitization

Mixture: Skin sensitization, Category 1; May cause an allergic skin reaction.

#### Triethylenetetramine (TETA)

Skin sensitization, Category 1; May cause an allergic skin reaction.  
EU Harmonised Classification (rabbit)

#### 2-(2-Aminoethylamino)ethanol (AEEA)

Skin sensitization, Category 1; May cause an allergic skin reaction.  
Sensitisation (Mouse) – positive (OECD 429)

#### 2-Piperazin-1-ylethylamine

Skin sensitization, Category 1B; May cause an allergic skin reaction.  
Sensitisation (Guinea pig) – positive (OECD 406)

#### Tetraethylenepentamine (TEPA)

Skin sensitization, Category 1; May cause an allergic skin reaction.

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		EU Harmonised Classification
	Diethylenetriamine (DETA)	Skin sensitization, Category 1; May cause an allergic skin reaction. Sensitisation (Mouse) – positive (OECD 429)
<b>Germ cell mutagenicity</b>		Mixture: Based upon the available data, the classification criteria are not met.
<b>Carcinogenicity</b>		Mixture: Based upon the available data, the classification criteria are not met.
<b>Reproductive toxicity</b>		Mixture: Reproductive toxicity, Category 1B; May damage fertility or the unborn child.
	2-(2-Aminoethylamino)ethanol (AEEA)	Reproductive toxicity, Category 1B; May damage fertility or the unborn child. Test Result: NOAEL 250 mg/kg bw/day (OECD 421) Test Result: NOAEL 50 mg/kg bw/day (OECD 414)
	2-Piperazin-1-ylethylamine	Reproductive toxicity, Category 2; Suspected of damaging fertility or the unborn child. NOAEL 75 mg/kg bw/day (OECD 414)
<b>STOT - single exposure</b>		Mixture: Based upon the available data, the classification criteria are not met.
<b>STOT - repeated exposure</b>		Mixture: Specific target organ toxicity — repeated exposure, Category 2; May cause damage to organs through prolonged or repeated exposure.
	2-Piperazin-1-ylethylamine	Specific target organ toxicity — repeated exposure, Category 1; Causes damage to organs through prolonged or repeated exposure: Respiratory tract NOAEL (Oral) 2000 mg/l (OECD 422) NOEC (Inhalation) 0.2 mg/m <sup>3</sup> (OECD 413)
<b>Aspiration hazard</b>		Mixture: Based upon the available data, the classification criteria are not met.
<b>Information on likely routes of exposure</b>		
Inhalation		Possible – accidental exposure.
Ingestion		Unlikely – accidental exposure.
Skin Contact		Possible – accidental exposure.
Eye Contact		Unlikely – accidental exposure.
<b>Early onset symptoms related to exposure</b>		Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage.
<b>Delayed health effects from exposure</b>		May damage fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure.
<b>Other information</b>		
NTP Report on Carcinogens		None of the components are listed.
IARC Monographs		None of the components are listed.
OSHA Designated Carcinogen		None of the components are listed.

## SECTION 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>		Mixture: Hazardous to the aquatic environment, Chronic, Category 3; Harmful to aquatic life with long lasting effects. Estimated Mixture LC50 >10 to ≤ 100 mg/l (Fish)
	Triethylenetetramine (TETA)	Hazardous to the aquatic environment, Chronic, Category 3; Harmful to aquatic life with long lasting effects. EU Harmonised Classification
	2-Piperazin-1-ylethylamine	Hazardous to the aquatic environment, Chronic, Category 3; Harmful to aquatic life with long lasting effects. EC50 (Daphnia magna) 58 mg/l (48 hour) (OECD 202)
	Tetraethylenepentamine (TEPA)	Hazardous to the aquatic environment, Chronic, Category 2; Toxic to aquatic life with long lasting effects. EU Harmonised Classification
<b>Persistence and degradability</b>		No data for the mixture as a whole.
	Triethylenetetramine (TETA)	No data
	2-(2-Aminoethylamino)ethanol (AEEA)	No data
	2-Piperazin-1-ylethylamine	ECHA Registration Endpoint summary: Little or no biodegradation has been observed (OECD 301 F)
	Tetraethylenepentamine (TEPA)	No data



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<b>Bioaccumulative potential</b>	Diethylenetriamine (DETA)	Degradation in water (28 days) – 87% (OECD 301 D) No data for the mixture as a whole.
	Triethylenetetramine (TETA)	No data
	2-(2-Aminoethylamino)ethanol (AEEA)	No data
	2-Piperazin-1-ylethylamine	The substance has low potential for bioaccumulation.
	Tetraethylenepentamine (TEPA)	No data
<b>Mobility in soil</b>	Diethylenetriamine (DETA)	Not anticipated to bioaccumulate BCF: > 2.8 - <= 6.3 (OECD 305 C) No data for the mixture as a whole.
	Triethylenetetramine (TETA)	No data
	2-(2-Aminoethylamino)ethanol (AEEA)	No data
	2-Piperazin-1-ylethylamine	The substance is predicted to have low mobility in soil.
	Tetraethylenepentamine (TEPA)	No data
<b>Other adverse effects</b>	Diethylenetriamine (DETA)	The substance has moderate mobility in soil. Log Koc: >= 3.4 - <= 4.6
		Mixture: The product is predicted to be not classified as PBT or vPvB.
		None of the substances in this product fulfil the criteria for being regarded as a PBT or vPvB substance.

## SECTION 13: DISPOSAL CONSIDERATIONS

<b>Waste treatment methods</b>	This material and its container must be disposed of as hazardous waste. Containers of this material may be hazardous when empty since they retain product residue. Dispose of wastes in an approved waste disposal facility. Dispose of contents in accordance with local, state or national legislation.
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## SECTION 14: TRANSPORT INFORMATION

	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	UN 2259	UN 2259	UN 2259
<b>UN proper shipping name</b>	TRIETHYLENETHETRA MINE	TRIETHYLENETHETRA MINE	TRIETHYLENETHETRA MINE
<b>Transport hazard class(es)</b>	8	8	8
<b>Packing group</b>	II	II	II
<b>Environmental hazards</b>	Not classified	Not classified as a Marine Pollutant.	Not classified
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.		
<b>Special precautions for user</b>	See Section: 2		
<b>Additional Information</b>	None.		

## SECTION 15: REGULATORY INFORMATION

### Safety, health and environmental regulations/legislation specific for the substance or mixture

#### US Federal Regulations

TSCA (Toxic Substance Control Act)	All components are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).
TSCA Chemical Data Reporting (CDR)	2,2'-Iminodi(ethylamine): subject to 25,000 lb reporting threshold
EPCRA/SARA Section 302 Extremely Hazardous Substances	Not Listed
EPCRA Section 313 Toxics Release Inventory (TRI) Program	Not Listed
NIOSH Occupational Carcinogen List	Not Listed
OSHA List of highly hazardous chemicals, toxics and reactives	Not Listed
NTP Report on Carcinogens (RoC) List	Not Listed
Poison Prevention Packaging Act	Not Listed
<b>US State Regulations</b>	
California State, Proposition 65 List	Not Listed



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New Jersey State Worker and Community RTK Act	2,2'-Iminodi(ethylamine): RTKHSL. SHHSL
Pennsylvania State, Worker and Community RTK Act	2,2'-Iminodi(ethylamine): Hazardous Substance List
Rhode Island State, Hazardous Substances RTK Act	2,2'-Iminodi(ethylamine): Hazardous Substance List
California State, Proposition 65 List	Not Listed
New Jersey State Worker and Community RTK Act	2,2'-Iminodi(ethylamine): RTKHSL. SHHSL
<b>Non-Regional</b>	
IARC Monographs, List of Classifications	Not Listed

## SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Updated substance / mixture classification. New SDS Regulation compliant with HazCom 2012 format, various sections have been updated to include new information. Please review SDS with care.

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### References:

Existing Safety Data Sheet (SDS).

EU Harmonised Classification for Triethylenetetramine (TETA) (CAS No. 112-24-3), 2-(2-Aminoethylamino)ethanol (AEEA) (CAS No. 111-41-1), 2-Piperazin-1-ylethylamine (CAS No. 140-31-8), Tetraethylenepentamine (TEPA) (CAS No. 112-57-2) and 2,2'-Iminodiethylamine (CAS No. 111-40-0). Existing ECHA registration(s) for 2-(2-Aminoethylamino)ethanol (AEEA) (CAS No. 111-41-1), 2-Piperazin-1-ylethylamine (CAS No. 140-31-8) and 2,2'-Iminodiethylamine (CAS No. 111-40-0).

### Literature References

1. Smyth, H.F. et al. 1962. Am Ind Hyg Assoc J, vol 23 ; p. 95.

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200	Classification Procedure
Acute Toxicity (Dermal) - Category 4	Acute Toxicity Estimate (ATE) Mixture Calculation
Skin Corrosive - Category 1B	Threshold Calculation
Skin Sensitizer - Category 1	Threshold Calculation
Eye Damage - Category 1	Threshold Calculation
Reproductive Toxicant - Category 1B	Threshold Calculation
Specific target organ toxicity — repeated exposure, Category 1	Threshold Calculation
Aquatic Chronic - Category 3	Summation Calculation

### LEGEND

ACGIH: American Conference of Governmental Industrial Hygienists  
ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road  
BEI: Biological Exposure Indices (ACGIH)  
CAS: Chemical Abstracts Service  
ECHA: European Chemicals Agency  
EPCRA: Emergency Planning and Community Right-to-Know Act  
IARC: International Agency for Research on Cancer  
IATA: International Air Transport Association  
IMDG: International Maritime Dangerous Goods  
LTEL: Long Term Exposure Limit  
NIOSH: National Institute of Occupational Safety and Health  
NTP: National Toxicology Program  
OECD: Organisation for Economic Co-operation and Development  
OSHA: The Occupational Safety & Health Administration

PBT: Persistent, Bioaccumulative and Toxic  
PEL: Permissible exposure limit  
QSAR: Quantitative structure-activity relationship  
RID: International Carriage of Dangerous Goods by Rail  
REL: Recommended exposure limit  
RTK: Right-to-Know  
SARA: Superfund Amendments and Reauthorization Act  
SCL: Specific Concentration Limit  
STEL: Short Term Exposure Limit  
TLV: Threshold Limit value  
TSCA: Toxic Substance Control Act  
TWA: Time Weighted Average  
vPvB: very Persistent and very Bioaccumulative

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

### Disclaimers

# SAFETY DATA SHEET



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**ACCORDING TO OSHA HCS (29 CFR 1910.1200)**

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