SAFETY DATA SHEET

Version: 3.0 Date of Issue: 3rd March 2020 Date of First Issue: 20th March 2012

ACCORDING TO OSHA HCS (29 CFR 1910.1200)



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Product identifier used on the label	M-Bond Curing Agent 10A	
Other means of identification	Not applicable	
Recommended use of the chemical and restrictions		
on use		
Recommended use	Adhesives	
Restrictions on use	Anything other than the above.	
Details of the supplier of the safety data sheet		
Supplier	VISHAY MEASUREMENTS GRO	DUP, 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)	mm.us@vishaypg.com	
Emergency telephone number	1-800-424-9300	CHEMTREC (24 hours)
ON 2: HAZARD(S) IDENTIFICATION		
Classification of the substance or mixture in		
accordance with paragraph (d) of 29 CFR 1910.1200	Not close if a d	
Physical hazards	Not classified	
Health hazards	Acute Toxicity (Oral) - Category	
	Acute Toxicity (Dermal) - Catego	
	Acute Toxicity (Inhalation) - Cate	
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B	
	Acute Toxicity (Inhalation) - Cate	
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B	
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1	gory 2
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1	gory 2
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s	gory 2 ingle exposure, Category 3 (Respiratory tra
Environmental hazards	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation)	gory 2 ingle exposure, Category 3 (Respiratory tra
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Categor	gory 2 ingle exposure, Category 3 (Respiratory tra
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Categor	gory 2 ingle exposure, Category 3 (Respiratory tra
Environmental hazards Hazard Symbol	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Categor	gory 2 ingle exposure, Category 3 (Respiratory tra
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Categor	gory 2 ingle exposure, Category 3 (Respiratory tra
Hazard Symbol	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Categor	gory 2 ingle exposure, Category 3 (Respiratory tra
	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Category Aquatic Chronic - Category 2	gory 2 ingle exposure, Category 3 (Respiratory tr
Hazard Symbol Signal Word(s)	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Category Aquatic Chronic - Category 2	gory 2 ingle exposure, Category 3 (Respiratory tra
Hazard Symbol Signal Word(s)	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Category Aquatic Chronic - Category 2 OANGER Harmful if swallowed.	gory 2 ingle exposure, Category 3 (Respiratory tra
Hazard Symbol Signal Word(s)	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Category Aquatic Chronic - Category 2 DANGER Harmful if swallowed. Harmful if swallowed. Harmful in contact with skin. Fatal if inhaled.	gory 2 ingle exposure, Category 3 (Respiratory tra y 1B
Hazard Symbol Signal Word(s)	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Category Aquatic Chronic - Category 2 DANGER Harmful if swallowed. Harmful if swallowed. Harmful in contact with skin. Fatal if inhaled. Causes severe skin burns and eye	ingle exposure, Category 3 (Respiratory tra y 1B
Hazard Symbol Signal Word(s)	Acute Toxicity (Inhalation) - Cate Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific target organ toxicity — s irritation via inhalation) Reproductive Toxicant - Category Aquatic Chronic - Category 2 DANGER Harmful if swallowed. Harmful if swallowed. Harmful in contact with skin. Fatal if inhaled.	ingle exposure, Category 3 (Respiratory tra y 1B

May damage fertility (by ingestion or inhalation). Toxic to aquatic life with long lasting effects.

Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

Precautionary Statement(s)

Prevention

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Percent of the mixture consists of ingredient(s) of unknown acute toxicity:	0% of the mixture consists of ingredients of unknown acute inhalation toxicity. 0% of the mixture consists of ingredients of unknown acute oral toxicity. 0% of the mixture consists of ingredients of unknown acute dermal toxicity.
Other hazards	None known.
Disposal	Dispose of contents in accordance with local, state or national legislation.
	Store locked up.
Storage	Store in a well-ventilated place. Keep container tightly closed.
	Contaminated work clothing must not be allowed out of the workplace.
	Take off contaminated clothing and wash it before reuse. Contaminated work clothing must not be allowed out of the workplace.
	POISON CENTER/doctor.
	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a
	Immediately call a POISON CENTER/doctor.
	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	CENTER/doctor.
	lenses, if present and easy to do. Continue rinsing. Immediately call a POISON
	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact
	with water or shower. Immediately call a POISON CENTER/doctor.
	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin
Neaponac	If skin irritation occurs: Get medical advice/attention.
Response	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
	In case of inadequate ventilation wear respiratory protection. Avoid release to the environment.
	Use only outdoors or in a well-ventilated area.
	Do not eat, drink or smoke when using this product.
	Wash hands and exposed skin thoroughly after handling.
	Do not breathe vapors.
	Wear protective gloves/protective clothing/eye protection/face protection.

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
2,2'-Iminodi(ethylamine)	65-75	Diethylenetriamine (DETA) N,N-Bis(2-aminoethyl)amine	111-40-0	Acute Toxicity (Oral) - Category 4 Acute Toxicity (Dermal) - Category 4 Acute Toxicity (Inhalation) - Category 2 Skin Corrosive - Category 1B Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific Target Organ Toxicity Single Exposure - Category 3 (Respiratory Tract Irritation via inhalation)
4,4'- isopropylidenediphenol	25-35	Bisphenol A (BPA) 2,2-Bis(4- hydroxyphenyl)propane	80-05-7	Skin Sensitizer - Category 1 Eye Damage - Category 1 Specific Target Organ Toxicity Single Exposure - Category 3 (Respiratory Tract Irritation via inhalation) Reproductive Toxicant - Category 1B Aquatic Chronic - Category 2

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SECTION 4: FIRST AID MEASURES



Description of first aid measures	
Self-protection of the first aider	Wear suitable protective clothing. Wear respiratory protection, where available. Do not breathe vapour. Avoid all contact. Do not use mouth-to-mouth resuscitation. Contaminated clothing should be thoroughly cleaned. A washing facility/water for eye and skin cleaning purposes should be present. IF exposed or concerned: Call a POISON CENTER or doctor/physician.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing is laboured, oxygen should be administered by gualified personnel.
Skin Contact	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Gently wash with plenty of soap and water. Immediately call a POISON CENTER/doctor.
Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. 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.
Most important symptoms and effects, both acute and delayed	Fatal if inhaled. Causes severe skin burns and eye damage. Harmful if swallowed. Harmful in contact with skin. May cause an allergic skin reaction. May cause respiratory irritation. May damage fertility.
Indication of any immediate medical attention and special treatment needed	Treat symptomatically. Fluid build-up on the lung (pulmonary oedema) may occur up to 48 hours after exposure and could prove fatal. Patient should be kept under medical observation for at least 48 hours.
Notes to a physician:	
IF IN EYES:	Obtain prompt consultation, preferably from an ophthalmologist. Chemical eye burns may require extended irrigation.
IF SWALLOWED:	Due to irritant properties, swallowing may result in burns/ulceration of mouth, stomach and lower gastrointestinal tract with subsequent stricture.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media Suitable Extinguishing Media

Unsuitable extinguishing Media Special hazards arising from the substance or mixture Special protective equipment and precautions for fire fighters As appropriate for surrounding fire. Extinguish with carbon dioxide, dry chemical, foam or water-spray. Alcohol resistant foams (ATC type) are preferred. Halons. Do not use water jet. Direct water jet may spread the fire.

Not flammable. Decomposes in a fire giving off toxic fumes: Nitrogen oxides, Carbon monoxide, Carbon dioxide, Ammonia, Volatile Amines, Aldehydes. Fire fighters should wear complete protective clothing including self-contained breathing apparatus (SCBA). Evacuate the area and keep personnel upwind. Do not breathe fumes. Use water-spray to 'knock down' vapour, but do not use water jet on a leak of the tank. Shut off leaks if without risk. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

No action should be taken involving personal risk. Use personal protective equipment as required: See Section: 8. Ensure adequate ventilation. Avoid all contact. Do not breathe vapour. Ground and bond container and receiving equipment. Stop leak if safe to do so. Contaminated clothing should be laundered before reuse.

Environmental precautions

Avoid release to the environment. Do not allow to enter drains, sewers or

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Methods and material for containment and cleaning up

watercourses. Spillages or uncontrolled discharges into watercourses must be alerted to the Environment Agency or other appropriate regulatory body.

Small spillages: Adsorb spillages onto sand, earth or any suitable adsorbent material. Do not adsorb onto sawdust or other combustible materials. Transfer to a container for disposal.

Large spillages: Dike area to contain the spill and prevent releases to sewers, drains, or other waterways. Use water spray to cool and disperse vapours and protect personnel. Use vacuum equipment for collecting spilt materials, where practicable.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	Ensure operatives are trained to minimise exposures. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid all contact. Do not breathe vapour. 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. Avoid exposure during pregnancy.
Conditions for safe storage, including any incompatibilities	 Store under inert gas (e.g. nitrogen) to prevent ingress of moisture or air into the container. If a container is part emptied flush thoroughly with inert gas prior to resealing. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sources of ignition and direct sunlight. Suitable containers: Stainless steel, Aluminium. Unsuitable containers: Brass, Copper, copper alloy, Bronze. Keep away from fibrous insulations; spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.
Storage temperature Incompatible materials	Ambient. Keep at temperature not exceeding (\mathbb{C}): 27 Keep away from: Nitrosating agents, cellulose nitrate, Strong oxidising agents, strong bases, Acids, Aldehydes, metals (Copper, Zinc and their alloys), halogenated compounds, sawdust. Use of sodium nitrite or other nitrosating agents in formulations containing this product may lead to formation of suspected cancer-causing nitrosamines. May form explosive complexes with silver, cobalt, or chromium compounds. Corrosive to aluminum, copper, brass & zinc.

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/m³)	STEL (ppm)	STEL (mg/m³)	Note
2,2'-Iminodi(ethylamine) 111-40-0	1	4	-	-	NIOSH Skin	
2,2 -iminou(ethylamine)	111-40-0	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

Appropriate engineering controls

Not established

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.

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Individual protection measures, such as personal General hygiene measures for the handling of chemicals are applicable. protective equipment (PPE) Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier. Avoid all contact. Do not breathe vapour. Wash hands before breaks and after work. Keep work clothes separately. Do not eat, drink or smoke at the work place. Avoid exposure during pregnancy. Eye/face protection Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection. Recommended: EN166 or equivalent; Safety spectacles/goggles/full face shield. Skin protection Hand protection: Wear impervious gloves. Gloves should be changed regularly to avoid permeation problems. Breakthrough time of the glove material: refer to the information provided by the gloves' producer. For prolonged/frequent contact: Recommended: At least protective index 5, corresponding > 240 minutes of permeation time according to EN 374. Chlorinated polyethylene; Polyethylene; Ethyl vinyl alcohol laminate (EVAL). For brief/splash contact: Recommended: At least protective index 3, corresponding > 60 minutes of permeation time according to EN 374. 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): Respiratory protection Wear suitable respiratory protective equipment. Recommended: Organic vapor cartridge with a particulate pre-filter, type AP2 SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES Information on basic physical and chemical properties Appearance Clear Liquid Odor Ammoniacal Odour Odor Threshold Not available.

pH Melting Point/Freezing Point Initial boiling point and boiling range Flash Point Evaporation rate (Butyl acetate = 1) Flammability (solid, gas) Upper/lower flammability or explosive limits

Vapour pressure Vapour density Relative density Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition Temperature Not available. Not established. Not available. 199°C 102°C [Closed cup] Not established. Not applicable - Liquid Flammable Limits (Lower) (%v/v): 1.4 Flammable Limits (Upper) (%v/v): 9.2 <1 @ 27°C 3.56 (Air = 1) 1.02 g/cm³ (H₂O = 1) The product is soluble in water. Not available. Not available. Not available.

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Viscosity

Not available.

SECTION 10: STABILITY AND REACTIVITY	
Reactivity	Stable under normal conditions.
Chemical stability	Stable under normal conditions. May decompose if heated.
Possibility of hazardous reactions	Hazardous polymerisation will not occur. If spilt substance is absorbed in a rag, the high surface area of the material can allow autoignition at room temperature.
Conditions to avoid	Keep away from heat and sources of ignition. Keep at temperature not exceeding (${f C}$): 27. Protect from moisture.
Incompatible materials	Keep away from: Nitrosating agents, cellulose nitrate, Strong oxidising agents, strong bases, Acids, Aldehydes, metals (Brass, Copper, Bronze, Zinc and their alloys), halogenated compounds, sawdust. Use of sodium nitrite or other nitrosating agents in formulations containing this product may lead to formation of suspected cancer-causing nitrosamines. May form explosive complexes with silver, cobalt, or chromium compounds. Corrosive to aluminum, copper, brass & zinc.
Hazardous decomposition product(s)	Decomposes in a fire giving off toxic fumes: Nitrogen oxides, Carbon monoxide, Carbon dioxide, Ammonia, Volatile Amines, Aldehydes.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity - Ingestion	Mixture: Acute Toxicity (Oral) - Category 4; Harmful if swallowed.
	Acute Toxicity Estimate Mixture Calculation:
	LD50 expected to be 500 - 1000 mg/kg bw/day.
2,2'-Iminodi(ethylami	ne) Acute Toxicity (Oral) - Category 4; Harmful if swallowed.
	EU Harmonised Classification
Acute toxicity - Inhalation	Mixture: Acute Toxicity (Inhalation) - Category 2; Fatal if inhaled.
	Acute Toxicity Estimate Mixture Calculation:
	LC50 expected to be 0.5 – 1.0 mg/l
2,2'-Iminodi(ethylami	ne) Acute Toxicity (Inhalation) - Category 2; Fatal if inhaled.
	NOEL (rats): 0.07 mg/l air (aerosolized mist), in accordance with OECD 403 &
	TSCA Testing Guidelines (Unnamed publication, 1977)
Acute toxicity - Skin Contact	Mixture: Acute Toxicity (Dermal) - Category 4; Harmful in contact with skin.
	Acute Toxicity Estimate Mixture Calculation:
	LD50 expected to be 1000 - 2000 mg/kg bw/day.
2,2'-Iminodi(ethylami	ne) Acute Toxicity (Dermal) - Category 4; Harmful in contact with skin.
	EU Harmonised Classification
Skin corrosion/irritation	Mixture: Skin Corrosive - Category 1B; Causes severe skin burns.
2,2'-Iminodi(ethylami	ne) Skin Corrosive - Category 1B; Causes severe skin burns.
	EU Harmonised Classification
Serious eye damage/irritation	Mixture: Eye Damage - Category 1; Causes serious eye damage.
2,2'-Iminodi(ethylami	ne) Eye Damage - Category 1; Causes serious eye damage.
	Corrosive to rabbit eyes (Unnamed publication, 1970)
Bisphene	ol A Eye Damage - Category 1; Causes serious eye damage.
	EU Harmonised Classification
Respiratory or skin sensitization	Mixture: Skin Sensitizer - Category 1; May cause an allergic skin reaction.
2,2'-Iminodi(ethylami	ne) Skin Sensitizer - Category 1; May cause an allergic skin reaction.
	EU Harmonised Classification
Bisphene	ol A Skin Sensitizer - Category 1; May cause an allergic skin reaction.
	EU Harmonised Classification
Germ cell mutagenicity	Mixture: Based upon the available data, the classification criteria are not met.
Carcinogenicity	Mixture: Based upon the available data, the classification criteria are not met.
Reproductive toxicity	Mixture: Reproductive Toxicant - Category 1B; May damage fertility (by
	ingestion or inhalation).
Bisphene	A Reproductive Toxicant - Category 1B; May damage fertility (by ingestion or inhelation)
	inhalation). EU Harmonised Classification

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STOT - single exposure	Mixture: Specific target organ toxicity — single exposure, Category 3	
	(Respiratory Tract Irritation via inhalation)	
2,2'-Iminodi(ethylamine)	Specific target organ toxicity — single exposure, Category 3 (Respiratory Tract Irritation via inhalation)	
	Pulmonary oedema in rats observed (Unnamed publication, 1970) (OECD 403)	
Bisphenol A	Specific target organ toxicity — single exposure, Category 3 (Respiratory Tract Irritation via inhalation)	
	EU Harmonised Classification	
STOT - repeated exposure	Mixture: Based upon the available data, the classification criteria are not met.	
Aspiration hazard	Mixture: Based upon the available data, the classification criteria are not met.	
Information on likely routes of exposure		
Inhalation	Possible – accidental exposure.	
Ingestion	Unlikely – accidental exposure.	
Skin Contact	Possible – accidental exposure.	
Eye Contact	Unlikely – accidental exposure.	
Early onset symptoms related to exposure	Fatal if inhaled. Causes severe skin burns and eye damage. Harmful if swallowed. Harmful in contact with skin. May cause an allergic skin reaction. May cause respiratory irritation.	
Delayed health effects from exposure	May damage fertility. Fluid build-up on the lung (pulmonary oedema) may occur up to 48 hours after inhalation exposure and could prove fatal.	
Other information		
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.	
NIOSH Occupational Carcinogen List	None of the components are listed.	

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity		Aquatic Chronic - Category 2; Toxic to aquatic life with long lasting effects. Estimated Mixture LC50: <u><</u> 1 mg/l (Fish)
	Bisphenol A	Aquatic Chronic - Category 2; Toxic to aquatic life with long lasting effects.
		NOEC (Fish): 0.016 mg/L (Unnamed publication, 2000)
Persistence and degradability		No data for the mixture as a whole.
	2,2'-Iminodi(ethylamine)	Readily biodegradable. (OECD 302A)
	Bisphenol A	Readily biodegradable. (OECD 301F)
Bioaccumulative potential		No data for the mixture as a whole.
	2,2'-Iminodi(ethylamine)	The substance has low potential for bioaccumulation.
		Bioconcentration factor (BCF) : < 6.3 I/kg (Fish) (OECD 305C)
		EU ECHA Registration Endpoint summary.
	Bisphenol A	The substance has low potential for bioaccumulation.
		Bioconcentration factor (BCF) : < 73 l/kg (Fish)
		EU ECHA Registration Endpoint summary.
Mobility in soil		No data for the mixture as a whole.
	2,2'-Iminodi(ethylamine)	The substance has low mobility in soil.
		Koc: 19111 I/kg @ 25 °C; Log(Koc): 4.3 I/kg @ 25 °C (Unnamed publication,
		1991). EU ECHA Registration Endpoint summary.
	Bisphenol A	The substance has moderate mobility in soil.
		Koc: 750 l/kg @ 25 ℃ . EU ECHA Registration Endpoint summary.
Other adverse effects		Mixture: 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

Waste treatment methods

This material and its container must be disposed of as hazardous waste. Dispose of wastes in an approved waste disposal facility. Dispose of contents in

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accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION ADR/RID IMDG ΙΑΤΑ **UN number** UN 2927 UN 2927 UN 2927 UN proper shipping name TOXIC LIQUID, TOXIC LIQUID, TOXIC LIQUID, CORROSIVE, CORROSIVE, CORROSIVE, ORGANIC, N.O.S. ORGANIC, N.O.S. ORGANIC, N.O.S. (CONTAINS 2,2'-(CONTAINS 2,2'-(CONTAINS 2,2'-IMINODI(ETHYLAMINE) IMINODI(ETHYLAMINE) IMINODI(ETHYLAMINE) Transport hazard class(es) 6.1 + 8 6.1 + 8 6.1 + 8 Packing group Ш Ш Ш **Environmental hazards** Environmentally Classified as a Marine Environmentally hazardous substance Pollutant. hazardous substance Transport in bulk according to Annex II of MARPOL Not applicable. 73/78 and the IBC Code Special precautions for user See Section: 2 **Additional Information** None.

SECTION 15: REGULATORY INFORMATION

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 Bisphenol A: subject to 25,000 lb reporting threshold
EPCRA/SARA Section 302 Extremely Hazardous Substances	Not Listed
EPCRA Section 313 Toxics Release Inventory (TRI) Program	Bisphenol A: De Minimis limit: 1%
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
US State Regulations	
California State, Proposition 65 List	Bisphenol A: Safe harbor level - MADL: 3 (dermal exposure from solid materials) µg/day
New Jersey State Worker and Community RTK Act	2,2'-Iminodi(ethylamine): RTKHSL. SHHSL Bisphenol A: RTKHSL
Pennsylvania State, Worker and Community RTK Act	2,2'-Iminodi(ethylamine): Hazardous Substance List
	Bisphenol A: Hazardous Substance List; Environmental Hazard List
Rhode Island State, Hazardous Substances RTK Act Non-Regional	2,2'-Iminodi(ethylamine): Hazardous Substance List
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.

The following sections have updates indicated by :

Version3.0Revision Date3rd March 2020

ACCORDING TO OSHA HCS (29 CFR 1910.1200)

Date of First Issue 20th March 2012

References:

Existing Safety Data Sheet (SDS).

Existing ECHA registration(s) and Harmonised Classification(s) for 2,2'-iminodi(ethylamine) (CAS No. 111-40-0) and Bisphenol A (CAS No. 80-05-7).

Classification of the substance or mixture in accordance with paragraph (d) of 29 CFR 1910.1200	Classification Procedure
Acute Toxicity (Oral) - Category 4	Acute Toxicity Estimate (ATE) Mixture Calculation
Acute Toxicity (Dermal) - Category 4	Acute Toxicity Estimate (ATE) Mixture Calculation
Acute Toxicity (Inhalation) - Category 2	Acute Toxicity Estimate (ATE) Mixture Calculation
Skin Corrosive - Category 1B	Threshold Calculation
Skin Sensitizer - Category 1	Threshold Calculation
Eye Damage - Category 1	Threshold Calculation
Specific target organ toxicity — single exposure, Category 3 (Respiratory tract irritation via inhalation)	Threshold Calculation
Reproductive Toxicant - Category 1B	Threshold Calculation
Aquatic Chronic - Category 2	Summation Calculation

LEGEND

ACGIH: American Conference of Governmental Industrial Hygienists	OECD: Organisation for Economic Co-operation and Development
ADR: European Agreement Concerning the International Carriage of	OSHA: The Occupational Safety & Health Administration
Dangerous Goods by Road	
BEI: Biological Exposure Indices (ACGIH)	PBT: Persistent, Bioaccumulative and Toxic
CAS: Chemical Abstracts Service	PEL: Permissible exposure limit
ECHA: European Chemicals Agency	RID: International Carriage of Dangerous Goods by Rail
EPCRA: Emergency Planning and Community Right-to-Know Act	REL: Recommended exposure limit
EN: European Standard	RTK: Right-to-Know
IARC: International Agency for Research on Cancer	RTKHSL: Right to Know Hazardous Substance List
IATA: International Air Transport Association	SARA: Superfund Amendments and Reauthorization Act
IMDG: International Maritime Dangerous Goods	SCL: Specific Concentration Limit
LC50/LD50: Lethal Concentration/Lethal Dose (resulting in 50% death	SHHSL: Special Health Hazard Substance List
rate within animal test group)	
LTEL: Long Term Exposure Limit	STEL: Short Term Exposure Limit
NIOSH: National Institute of Occupational Safety and Health	TLV: Threshold Limit value
NOEC: No Observed Effect Concentration	TRQ: Threshold Reportable Quantity
NOEL: No Observable Effect Level	TSCA: Toxic Substance Control Act
NTP: National Toxicology Program	TWA: Time Weighted Average
OHAT: NTP: Office of Health Assessment and Translation	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.

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