Printing date 11/13/2017

AN ELLSWORTH ADHES

Reviewed on 11/13/2017

1 Identification Product identifier Trade name: EP1295 Black B Recommended use Epoxy Hardener Restrictions on use For industrial use only · Details of the supplier of the safety data sheet Manufacturer/Supplier: Manufacture/Supplier. ResinLab, LLC N109 W13300 Ellsworth Drive Germantown, WI 53022 1-877-259-1669 www.resinlab.com Information Department: Product Safety Department: msds@resinlab.com **Emergency Telephone Number:** North America - Chemtrec: 1-800-424-9300 (24 hours) International - Chemtrec: 01-703-527-3887 (24 hours) 2 Hazard(s) identification · Classification of the substance or mixture Skin Corr. 1B H314 Causes severe skin burns and eye damage. Skin Sens. 1 H317 May cause an allergic skin reaction. Repr. 2 H361 Suspected of damaging fertility or the unborn child. STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure. · Label elements GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS). Hazard pictograms GHS05 GHS07 GHS08 Signal word Danger · Hazard-determining components of labeling: N-(2-Aminoethyl)piperazine N-12-Allin local http://www.alline Styrenated phenol Fatty acids, tall-oil, reaction products with tetraethylenepentamine Polyamide CAS not available per 29CFR1910.1200(i) Amino ether - CAS number withheld as permitted by 29 CFR1910.1200(i). H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H361 Suspected of damaging fertility or the unborn child. H372 Causes damage to organs through prolonged or repeated exposure. Precautionary statements Avoid breathing dust/fume/gas/mist/vapors/spray Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves / eye protection / face protection. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. Store locked up. Dispose of contents/container in accordance with local/regional/national/international regulations. · Classification system: · NFPA System · NFPA ratings (scale 0 - 4) Health = 2Fire = 1Reactivity = 0NFPA special hazards (water reactivity and oxidizing property): None HMIS System HMIS-ratings (scale 0 - 4) HEALTH 2 Health = 2FIRE 1 Fire = 1Reactivity = 0**REACTIVITY** 0 Other hazards Results of PBT and vPvB assessment • PBT: Not applicable.

(Contd. on page 2)

Printing date 11/13/2017

Trade name: EP1295 Black B

vPvB: Not applicable.

3 Composition/information on ingredients

· Chemical characterization: Mixtures		
 Dangerous components 	S:	
CAS: 61788-44-1 EINECS: 262-975-0	Styrenated phenol Aquatic Chronic 2, H411 Skin Irrit. 2, H315; Skin Sens. 1, H317	10-20%
	Polyamide CAS not available per 29CFR1910.1200(i) Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	5-10%
CAS: 140-31-8 EINECS: 205-411-0 Index number: 612-105-00-4 RTECS: TK 8050000	N-(2-Aminoethyl)piperazine Acute Tox, 3, H311 Repr. 2, H361; STOT RE 1, H372 Skin Corr. 1B, H314 Acute Tox. 4, H302; Skin Sens. 1, H317 Aquatic Chronic 3, H412	5-10%
CAS: 68953-36-6 EINECS: 273-201-6	Fatty acids, tall-oil, reaction products with tetraethylenepentamine Skin Corr. 1A, H314 Aquatic Acuté 1, H400 Skin Sens. 1, H317	1-2.5%
	Amino ether - CAS number withheld as permitted by 29 CFR1910.1200(i) Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317	0.1-1%
CAS: 67762-90-7 EC number: 614-122-2	Siloxanes and Silicones, di-Me, reaction products with silica	0.1-1%
CAS: 112-57-2 EINECS: 203-986-2 Index number: 612-060-00-0 RTECS: KH8585000	Tetraethylenepentamine Skin Corr. 1B, H314 Aquatic Chronic 2, H411 Acute Tox. 4, H312	<i>≥</i> 0.1-≤0.25%
· Additional information:		

If the chemical name/CAS number is proprietary and or weight percentage is listed as a range, the specific chemical identity and or percentage of composition has been withheld as a trade secret.

4 First-aid measures

- Description of first aid measures
 General information:
 Keep warm, position comfortably and cover well.
 Immediately remove any clothing soiled by the product.
 Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
 After inhaleton:
 - After inhalation:
 - Remove victim from exposure to fresh air. Keep person at rest. Provide oxygen if person is not breathing. Supply fresh air and if symptoms occur call for a doctor. In case of unconsciousness place patient stably in side position for transportation.

 - After skin contact:

 - Immediately remove all contaminated clothing. Immediately wash with water and soap and rinse thoroughly. Seek medical treatment.

 - Seek medical advice.
 - After eye contact: Immediately flush opened eyes with water for 5 minutes, then remove contact lenses if present, continue flushing for at least another 15

Do not put any ointments, oils or medication in eyes without specific instructions. Get medical attention.

After swallowing: If victim is unconscious; never give anything by mouth. If victim is conscious rinse mouth and give small amounts of water.

If victim is conscious mass mount and great and great and point of the provided of the provide

- - Most important symptoms and effects, both acute and delayed No further relevant information available. Indication of any immediate medical attention and special treatment needed Check section 11 Toxicological Information for further relevant information.

5 Fire-fighting measures

Extinguishing media Suitable extinguishing agents: Use fire fighting measures that suit the environment.

- Alcohol resistant foam Fire-extinguishing powder Carbon dioxide
- Water spray
- Water spray water fog For safety reasons unsuitable extinguishing agents: Water with full jet Special hazards arising from the substance or mixture Will not burn unless preheated.



Reviewed on 11/13/2017

Reviewed on 11/13/2017

Printing date 11/13/2017

AN ELLSWORTH ADHESIVES

Trade name: EP1295 Black B

(Contd. of page 2)

In case of fire, the following can be released:

In case of the, the following can be released. Nitrogen oxides (NOx) Carbon dioxide (CO_2) and Carbon monoxide (CO) Aluminum oxide (AI_2O_3) dust, a serious respiratory irritant, may be formed during fires. Phosphorus oxides Advice for firefighters Advice for firefighters

Protective equipment:

If employees are expected to fight fires, they must be trained and equipped as stated in the OSHA fire brigades standard (29 CFR 1910'156) As with any fire, wear positive-pressure self-contained breathing apparatus and full protective gear that are NIOSH approved.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Wear protective equipment. Keep unprotected persons away.
- Do not breathe gas, vapors, dusts or mists if their inhalable particles occur during use. Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.

- Do not allow to enter severs/ surface or ground water. Methods and material for containment and cleaning up: For large spills: provide diking or containment to minimize spreading. If possible pump and store material in appropriate container. For small spills: Ventilate and wash area. Collect spills and absorbant material in appropriate container.
- Ensure adequate ventilation. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralizing agent if necessary. Dispose contaminated material as waste according to item 13.

7 Handling and storage

· Handling:

Precautions for safe handling Ensure good ventilation/exhaustion at the workplace. Prevent formation of aerosols. Keep away from incompatible material(s). Avoid any release into the environment. Do not breathe dust/fumes/mist/vapor/spray. Avoid contact with eyes, skin and clothing. Keep away from heat,sparks, flames and ignition sources. Observe all the personal protection requirements in Section 8.

· Conditions for safe storage, including any incompatibilities

- Storage:

Requirements to be met by storerooms and receptacles: Provide ventilation for receptacles. Keep stored in accordance with local, regional, national, and international regulations.

8 Exposure controls/personal protection

antral naramatar

· Control parameters			
Components with limit values that require monitoring at the workplace:			
140-31-8 N	140-31-8 N-(2-Aminoethyl)piperazine		
TEEL-1	Short-term value: 7.5 mg/m ³		
TEEL-2	Short-term value: 50.0 mg/m ³		
TEEL-3	Short-term value: 500 mg/m ³		
67762-90-7 Siloxanes and Silicones, di-Me, reaction products with silica			
OSHA PEL	Short-term value: 15 mg/m ³		
US ACGIH	Short-term value: 10 mg/m ³		
112-57-2 Tetraethylenepentamine			
WEEL	Long-term_value: 5 mg/m ³		
	Skin; DSEN		
 Additional Occupational Exposure Limit Values for possible hazards during processing: None. 			
· Exposure controls			

Exposure controls
If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below
recommended exposure limits.
If exposure limits have not been established, maintain airborne levels to an acceptable level.
• Personal protective equipment:
• General protective and hygienic measures:
Be sure to clean skin thoroughly after work and before breaks.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eves and skin

Avoid contact with the eyes and skin.

Personal Protective Equipment (PPE)

Breathing equipment: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits.

Use a NIOSH approved air-purifying organic vapor respirator if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air supplied (Contd. on page 4)



Page 4/8

Reviewed on 11/13/2017



Safety Glasses with side shields

• **Body protection:** Appropriate chemical resistant clothing. • **Limitation and supervision of exposure into the environment** The Engineering measures or controls, and PPE recommendations are only guidelines and may not apply to every situation. For additional information, please consult the corresponding requirements under OSHA 29 CFR 1910.94-95, and 29 CFR 1910.132-138.

9 Physical and chemical propertie	es	
Information on basic physical and chen General Information	nical properties	
Appearance:	Liquid	
· Color:	Tan	
· Odor: · Odor threshold:	Characteristic Not determined	
pH-value:	Not determined.	
Change in condition Melting point/Melting range: Boiling point/Boiling range:	Undetermined. Undetermined.	
· Flash point:	>93 °C (>199.4 °F)	
 Flammability (solid, gaseous): 	Not applicable.	
 Ignition temperature: 	Not determined.	
 Decomposition temperature: 	Not determined.	
· Auto igniting:	Product is not selfigniting.	
 Danger of explosion: 	Product does not present an explosion hazard.	
Explosion limits: Lower: Upper:	Not determined. Not determined.	
 Vapor pressure: Vapor Density: 	Not determined. not determined	
 Density at 20 °C (68 °F): Relative density Vapor density Evaporation rate 	1.44 g/cm³ (12.02 lbs/gal) Not determined. Not determined. Not determined.	
Solubility in / Miscibility with Water:	Partly miscible.	
· Partition coefficient (n-octanol/wate	· Partition coefficient (n-octanol/water): Not determined.	
Viscosity: Dynamic: Kinematic: VOC content:	Not available. Not available. 0.00 % 0.0 g/l / 0.00 lb/gl	

10 Stability and reactivity

· Reactivity No further relevant information available.

- · Hazardous Reactivity and Chemical Stability Stable under normal conditions of use, storage and temperatures. Thermal decomposition / conditions to be avoided:
- To avoid thermal decomposition do not overheat. No decomposition if used and stored according to specifications.
- Possibility of hazardous reactions
- May slowly corrode copper, aluminum, nickel, cobalt, zinc and galvanized surfaces. Exothermic polymerization. Conditions to avoid Keep away from heat, sparks, flame and any other ignition sources. Incompatible materials:

Metals

(Contd. on page 5)

Page 5/8

Safety Data Sheet acc. to OSHA HCS

Reviewed on 11/13/2017

(Contd. of page 4)

Trade name: EP1295 Black B

Printing date 11/13/2017

00

AN ELLSWORTH ADHESIVES COMPANY 🙆

chlorinated hydrocarbons Oxidizing agents Sodium hypochlorite, Nitrous acid and other nitrosating agents Strong reducing agents Acids Chlorinated rubber Bases (Alkalis) • **Hazardous decomposition products:** Possible in traces.

11 Toxicological information

· Information on toxicological effects			
· LL	. 1 D/L C50 values that are relevant for classification		
21645-51-	2 Aluminu	ım hydroxide	
Oral	LD50	mg/kg (rat) (LD0(OECD TG 401)>5000mg/kg: no death occurred)	
Dermal	LD50	mg/kg (Test species: n/a) (Toxicity not expected based on acute oral data)	
Inhalative	LC50/4 h	mg/l (Test species: n/a) (Toxicity not expected as a wetted form)	
474919-59	9-0 1,2-Cy	clohexanedicarboxylic acid, dinonylester, branched and linear	
Oral	LD50	>5,000 mg/kg (rat) OECD Test Guideline 423	
Dermal	LD50	>2,000 mg/kg (read across from 101-68-8) OECD Guideline 402	
61788-44-	1 Styrena	ted phenol	
Oral	LD50	>2,000 mg/kg (read across from 101-68-8) (OECD 423)	
Dermal	LD50	>2,000 mg/kg (read across from 101-68-8) (OECD 402)	
Inhalative	LC50/4 h	mg/l (rat) in aerosol form.	
140-31-8	N-(2-Amin	oethyl)piperazine	
Oral	LD50	2,140 mg/kg (rat)	
Dermal	LD50	866 mg/kg (rabbit)	
Inhalative	LC50/4 h	mg/l (rat) (No mortality observed at saturated atmosphere)	
68333-79-	9 Ammon	ium Polyphosphate	
Oral	LD50	5,625 mg/kg (rat) LD0 (OECD TG 425) ≥ 2000mg/kg; no death occurred. All animals survived, gained weight and appeared active and healthy throughout the study period. Reference: SIDS Dossier (2007).	
Dermal	LD50	mg/kg (rat) (LD0 (OECD TG 402) ≥ 5000mg/kg; no death occurred) All animals survived, gained weight and appeared active and healthy throughout the study period. Reference: SIDS Dossier (2007).	
Inhalative	LC50/4 h	mq/l (Test species: n/a) (Toxicity not expected due to wetted form)	
68953-36-	6 Fatty ac	ids, tall-oil, reaction products with tetraethylenepentamine	
Oral	LD50	mg/kg (rat) (LD50 > 2000 mg/kg)	
Dermal	LD50	mg/kg (rabbit) (LD50 \ge 8550 mg/kg)	
· Pr	imary irrit · on the s · on the e	tant effect: kin: Caustic effect on skin and mucous membranes. ye: Strong caustic effect. p: Sensitization possible through skin contact.	
Additi The pi Corros Irritan	ional toxic roduct sho sive	ws the following dangers according to internally approved calculation methods for preparations:	
Swallo	wing will l	ead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.	
· Carcinogenic Categories			
None of th	e ingredie	nts is listed.	
NTP (National Toxicology Program)			
None of the ingredients is listed.			
	· OSHA-C	a (Occupational Safety & Health Administration)	
None of th	e ingredie	nts is listed.	

12 Ecological information

· Toxicity	
· Aquatic toxicity:	
21645-51-2 Aluminum hydroxide	
EC50 mg/kg (rabbit) (OECD TG 404; semiocclusive; 4hr-contact; undiluted)	
474919-59-0 1,2-Cyclohexanedicarboxylic acid, dinonylester, branched and linear	
EC50 mg/kg (rabbit)	
61788-44-1 Styrenated phenol	
EC50 mg/kg (rabbit) (OECD 404)	
	(Contd. on page 6)
	03



Page 6/8

Reviewed on 11/13/2017

Trade name: EP1295 Black B

Printing date 11/13/2017

(Contd. of page 5)
Polyamide CAS not available per 29CFR1910.1200(i)
EC50 mg/kg (Test species: n/a)
140-31-8 N-(2-Aminoethyl)piperazine
EC50 mg/kg (rabbit) (US DOT Corrosivity Assay)
68333-79-9 Ammonium Polyphosphate
EC50 mg/kg (rabbit) (24hr-contact; Draize score: 0 (Max. 8)) The substance caused slight irritation in an FDA-Richtlinie test; another study using 90% concentrated substance led no irritating effects. Meanwhile, it was not irritating through an 24-hr exposure in rabbits. When considering the weight of all evidence, the substance was not determined to be irritating to rabbit skin. Reference: IUCLID Dataset (2000).
68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine
EC50 mg/kg (No data available)
 Persistence and degradability No further relevant information available. Behavior in environmental systems: Behavior in environmental systems: Bioaccumulative potential No data available. Mobility in soil No further relevant information available. Additional ecological information: The product is non-rapid degradable, and low or not highly bioaccumulative. General notes: Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Results of PBT and vPvB assessment PBT: None of the ingredients is listed. VPVB: None of the ingredients is listed. Other adverse effects No further relevant information available.
13 Disposal considerations

· Waste treatment methods

Recommendation:
 Must be specially treated adhering to official regulations.
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings: Recommendation: Dispose of according to your local waste regulations.

14 Transport information	
· UN-Number · DOT, ADN, IMDG, IATA	not regulated
UN proper shipping name DOT, ADN, IMDG, IATA	not regulated
 Transport hazard class(es) 	
· DOT, ADN, IMDG, IATA · Class	not regulated
· Packing group · DOT, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
 Special precautions for user 	Not applicable.
 Transport in bulk according to Annex II of MARPOL73/78 and t IBC Code 	he Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture	
SARA Section 355 (extremely hazardous substances):	
None of the ingredients is listed.	
SARA Section 313 (Specific toxic chemical listings):	
None of the ingredients is listed.	
• SARA Section 311/312 (Hazardous Chemical Inventory Reporting)	
140-31-8 N-(2-Aminoethyl)piperazine	A, C 5-10%
112-57-2 Tetraethylenepentamine	A ≥0.1-≤0.25%
Hazard Abbreviations for SARA 311/312 A - Acute Health Hazard C - Chronic Health Hazard F - Fire Hazard R - Reactive Hazard S - Sudden Release of Pressure Hazard	
· TSCA (Toxic Substances Control Act):	
21645-51-2 Aluminum hydroxide	
474919-59-0 1,2-Cyclohexanedicarboxylic acid, dinonylester, branched and linear	
	(Contd. on page 7)
112-57-2 Tetraethylenepentamine • Hazard Abbreviations for SARA 311/312 A - Acute Health Hazard C - Chronic Health Hazard F - Fire Hazard R - Reactive Hazard S - Sudden Release of Pressure Hazard • TSCA (Toxic Substances Control Act): 21645-51-2 Aluminum hydroxide 474919-59-0 1,2-Cyclohexanedicarboxylic acid, dinonylester, branched and linear	A ≥0.1-≤0.255



Page 7/8

Reviewed on 11/13/2017

Printing date 11/13/2017

Trade name: EP1295 Black B

	(Contd. of page 6)
61788-44-1 Styrenated phenol	(conta: or page of
140-31-8 N-(2-Aminoethyl)piperazine	
68333-79-9 Ammonium Polyphosphate	
68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine	
1702-90-7 Sinoxanes and Sincones, unive, reaction products with sinca	
T2-07-2 Tedaeutyjenepenannie	
· I SCA new (21st Century Act) (Substances not insted)	
A mino ether - CAS number withheld as permitted by 29 CER1910 1200(i)	
· Proposition 65	
Chemicals known to cause cancer:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for females:	
None of the ingredients is listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients is listed.	
Chemicals known to cause developmental toxicity:	
None of the ingredients is listed.	
· Carcinogenic categories	
EPA (Environmental Protection Agency)	
None of the ingredients is listed.	
TLV (Threshold Limit Value established by ACGIH)	
None of the ingredients is listed.	
• NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
· International Regulation Lists	
Chinese Chemical Inventory of Existing Chemical Substances:	
21645-51-2 Aluminum hydroxide	
61788-44-1 Styrenated phenol	
140-31-8 IV-(2-Aminoethyl/)piperazine	
680535-79-9 Ammonium Polyprospirate	
67762-90-71 Slozanes, rainon, reaction products with terrateringenepertamine	
112-57-2 Tetraethylenepentamine	
GHS label elements GHS label elements	
• National regulations:	
Japanese Existing and New Chemical Substance List:	
21645-51-2 Aluminum hydroxide	
61788-44-1 Styrenated phenol	
140-31-8 N-(2-Aminoethyl/)piperazine	
68053-79-9 Ammonium Polyprospitale	
67762-90-71 Slovanes and Slicones di-Me reaction products with slica	
112-57-2 Tetraethylenepentamine	
Korean Existing Chemical Inventory:	
21645-51-2 Aluminum hydroxide	
61788-44-1 Styrenated phenol	
140-31-8 N-(2-Aminoethyl)piperazine	
68333-79-9 Ammonium Polyphosphate	
67762-00-7 Silovanes and Silicones, di-Mo, reaction products with tetraethylenepentamine	
112-50-7 Silozaries and Silicones, di-We, reaction products with Silica	
. Furonean Pro-registered substances:	
21645-51-2 Aluminum hydroxide	
474919-59-0 1.2-Cyclohexanedicarboxylic acid, dinonylester, branched and linear	
61788-44-1 Styrenated phenol	
140-31-8 N-(2-Aminoethyl)piperazine	
68333-79-9 Ammonium Polyphosphate	
68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine	
07702-90-71 Siloxanes and Silicones, al-Me, reaction products with silica	
EINEUS LIST:	
2 1040-01-2 AURINIUM NYUROXIUE 61788-44-1 Styrepated phenol	
140-31-8 N-(2-Aminoethyl)piperazine	
68333-79-9 Ammonium Polyphosphate	
68953-36-6 Fatty acids, tall-oil, reaction products with tetraethylenepentamine	
112-57-2 Tetraethylenepentamine	
	(Contd. on page 8)



Printing date 11/13/2017

Trade name: EP1295 Black B

· ELINCS List: None of the ingredients is listed.

· REACh - Substances of Very High Concern (SVHC) List:

None of the ingredients is listed.

· Restriction of Hazardous Substances Directive (RoHS) list:

None of the ingredients is listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department Issuing (M)SDS: Product Development Department Contact: msds@resinlab.com Date of preparation / last revision 11/13/2017 / 2 * Data compared to the previous version altered.

US

Reviewed on 11/13/2017

(Contd. of page 7)

