

Revision date: 11/04/2022

	ION 1: Identification		
1.1.	Identification		
	ct form	: Mixture	
Trade	name	: Armstrong A-706	
1.2.	Recommended use and restr	ctions on use	
Use of	f the substance/mixture	: Adhesives, binding agents	
Recor	nmended use	: One part heat cure epoxy	
Restri	ctions on use	: Product for industrial use only	
1.3.	Supplier		
N109 Germa T:1-87	Lab, LLC W13300 Ellsworth Drive antown, WI 53022 - United States 77-259-1669 trong™ is a trademark of Henkel ct manufactured under license fro	and its affiliates in the US and elsewhere, and used under license. n Henkel.	
1.4.	Emergency telephone number		
	gency number	: CHEMTREC:1-800-424-9300 (USA); +1 703-527-3887 (International)	
Seriou Skin s	orrosion/irritation Category 2 is eye damage/eye irritation Categ ensitization, Category 1 t of H statements : see section 16	H315 Causes skin irritation ory 2 H319 Causes serious eye irritation H317 May cause an allergic skin reaction	
	GHS Label elements, includir	a processitionary atotomonto	
2.2. CHO 11		g precautionary statements	
	S labeling d pictograms (GHS US)		
	I word (GHS US)	: Warning	
0	d statements (GHS US)	: H315 - Causes skin irritation	
nazdi		H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation	
Preca	utionary statements (GHS US)	 P261 - Avoid breathing dust/fume/gas/mist/vapors/spray. P264 - Wash hands, forearms and face thoroughly after handling. P272 - Contaminated work clothing must not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection. P302+P352 - If on skin: Wash with plenty of water. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P501 - Dispose of contaminated clothing and wash it before reuse. 	

with local, regional, national and/or international regulation.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Safety Data Sheet

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

SECTION 3: Composition/Information on ingredients

Substances 3.1. Not applicable

3.2. **Mixtures**

Name	Product identifier	%
Epoxy Resin	(CAS-No.) 25068-38-6	30 – 50
Aluminum	(CAS-No.) 7429-90-5	30 – 50
Bisphenol A, epichlorohydrin, dimer fatty acids polymer	(CAS-No.) 67989-52-0	1 – 5

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

SECTION 4: First-aid measures	
4.1. Description of first aid measures	
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse. Thoroughly clean shoes before reuse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Immediately rinse with plenty of water (for at least 15 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical advice/attention.
4.2. Most important symptoms and effe	cts (acute and delayed)
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
Symptoms/effects after eye contact	: Eye irritation.
4.3. Immediate medical attention and sp	pecial treatment, if necessary
Treat symptomatically.	
SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguis	hing media
Suitable extinguishing media	: Sand. Dry chemical. Carbon dioxide.
Unsuitable extinguishing media	: Water.
5.2. Specific hazards arising from the c	hemical
Fire hazard	: If cured material is sanded and generates metal fines in a fire situation use Class D extinguisher.
Reactivity in case of fire	: Aluminum reacts exothermically with water, acids and alkalis to produce hydrogen. Under fire conditions closed containers may rupture or explode.
Hazardous decomposition products in case of fire	: Toxic fumes may be released, Carbon oxides (CO, CO2), Phenolic compounds
5.3. Special protective equipment and p	precautions for fire-fighters
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	isures
6.1. Personal precautions, protective ed	quipment and emergency procedures
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area.
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.	
6.3. Methods and material for containm	ent and cleaning up
For containment	: Collect spillage.
Methods for cleaning up	: Take up liquid spill into absorbent material.
11/04/2022	EN (English US) 2/7

Safety Data Sheet

Other information	: Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
For further information refer to section 13	i.
SECTION 7: Handling and stor	age
7.1. Precautions for safe handlin	g
Additional hazards when processed	: Do not breathe dust created by sanding, grinding or machining.
Precautions for safe handling	: Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace. Wear personal protective equipment.
Hygiene measures	: 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 in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Bisphenol A, epichlorohydrin, dimer fatty acids polymer (67989-52-0)		
Not applicable		
Epoxy Resin (25068-38-6)		
Not applicable		
Aluminum (7429-90-5)		
ACGIH	Local name	Aluminum metal and insoluble compounds
ACGIH	ACGIH OEL TWA	1 mg/m ³ (Respirable fraction)
ACGIH	Remark (ACGIH)	TLV® Basis: Pneumoconiosis; LRT irr; neurotoxicity. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2022
OSHA	OSHA PEL (TWA) [1]	15 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls	
Appropriate engineering controls	: Ensure good ventilation of the work station, ventilate curing ovens to prevent emissions in the workplace.
Environmental exposure controls	: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Eye protection:

Safety glasses with side shields

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties			
9.1. Information on basi	c physical and chemical properties		
Physical state	: Liquid		
11/04/2022	EN (English US)	3/7	

Safety Data Sheet

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

6 6 7	,
Color	: dark gray
Odor	: mild
Odor threshold	: No data available
pH	: No data available
Melting point	: Not applicable
Freezing point	: No data available
Boiling point	: No data available
Flash point	: > 93.33 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Density	: 1.54 g/cm ³
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, dynamic	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
VOC content	No data 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

Contact with acids, alkalis, or water may release hydrogen gas.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. To avoid thermal decomposition, do not overheat. Do not allow contact with water.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases. Amines. Nitrates. Water. Caustics.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Refer to section 5.2 for hazardous decomposition products during combustion.

.1. Information on toxicological effe	ate a
.1. Information on toxicological ene	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Epoxy Resin (25068-38-6)	
LD50 oral rat	> 2000 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rat	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
Aluminum (7429-90-5)	
LD50 oral rat	> 15900 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)

Safety Data Sheet

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

Aluminum (7429-90-5)	
LC50 Inhalation - Rat	> 0.888 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Remarks on results: other:
kin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye irritation.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Epoxy Resin (25068-38-6)	
NOAEL (chronic,oral,animal/male,2 years)	15 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicit (migrated information)
NOAEL (chronic,oral,animal/female,2 years)	100 mg/kg body weight Animal: rat, Animal sex: female, Guideline: OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies), Guideline: EPA OPPTS 870.4300 (Combined Chronic Toxicity / Carcinogenicity), Guideline: other:MITI, Japanese ministry of international trade and industry, February 1998, Remarks on results: other:Effect type: toxicity (migrated information)
Reproductive toxicity	: Not classified
TOT-single exposure	: Not classified
TOT-repeated exposure	: Not classified
Aluminum (7429-90-5)	
LOAEC (inhalation,rat,dust/mist/fume,90 days)	0.05 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90- Day Study)
NOAEL (subchronic,oral,animal/male,90 days)	1034 mg/kg body weight Animal: dog, Animal sex: male, Guideline: OECD Guideline 409 (Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents)
NOAEL (subchronic,oral,animal/female,90 days)	1087 mg/kg body weight Animal: dog, Animal sex: female, Guideline: OECD Guideline 409 (Repeated Dose 90-Day Oral Toxicity Study in Non-Rodents)
spiration hazard	: Not classified
Symptoms/effects after skin contact	: Irritation. May cause an allergic skin reaction.
symptoms/effects after eye contact	: Eye irritation.

SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
Epoxy Resin (25068-38-6)	

1.3 mg/l (96 h, Pisces, Literature study)	
≈ 2 mg/l Test organisms (species): Daphnia magna	
1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	

12.2. Persistence and degradability

Epoxy Resin (25068-38-6)		
Persistence and degradability	Not readily biodegradable in water.	
Aluminum (7429-90-5)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	

12.3. Bioaccumulative potential

Safety Data Sheet

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

Partition coefficient n-octanol/water (Log Pow)	3 (Estimated value, 25 °C)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).	
Aluminum (7429-90-5)		
Bioaccumulative potential	No bioaccumulation data available.	
4. Mobility in soil		
Epoxy Resin (25068-38-6)	59 mN/m (20 °C, 0.09 g/l)	
4. Mobility in soil Epoxy Resin (25068-38-6) Surface tension Ecology - soil	59 mN/m (20 °C, 0.09 g/l) No (test)data on mobility of the substance available.	
Epoxy Resin (25068-38-6) Surface tension		

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal consideration	ns
I3.1. Disposal methods	
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
SECTION 14: Transport information	
Department of Transportation (DOT) In accordance with DOT	
Not regulated	
Transportation of Dangerous Goods	
Not applicable	
Transport by sea	
Transport document description (IMDG)	: UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Epoxy Resin), 9, III, MARINE POLLUTANT
UN-No. (IMDG)	: 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Class (IMDG)	: 9 - Miscellaneous dangerous substances and articles
Packing group (IMDG)	: III - substances presenting low danger
Limited quantities (IMDG)	: 5 L
Air transport	
Transport document description (IATA)	: UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Epoxy Resin), 9, III
UN-No. (IATA)	: 3082
Proper Shipping Name (IATA)	: Environmentally hazardous substance, liquid, n.o.s.
Class (IATA)	: 9 - Miscellaneous Dangerous Substances and Articles
Packing group (IATA)	: III - Minor Danger
SECTION 15: Regulatory information	n
5.1. US Federal regulations	
Chemical(s) subject to the reporting requirer 1986 and 40 CFR Part 372.	nents of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of
Aluminum	CAS-No. 7429-90-5 30 – 50%

Safety Data Sheet

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

Bisphenol A, epichlorohydrin, dimer fatty acids polymer (67989-52-0)		
sted on the United States TSCA (Toxic Substances Control Act) inventory		
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the Chemical Data Reporting Rule, (40 CFR 711).	
Epoxy Resin (25068-38-6) Listed on the United States TSCA (Toxic Substances Control Act) inventory		
		EPA TSCA Regulatory Flag
Aluminum (7429-90-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313		

15.2. International regulations

CANADA

Bisphenol A, epichlorohydrin, dimer fatty acids polymer (67989-52-0)	
Listed on the Canadian DSL (Domestic Substances List)	
Epoxy Resin (25068-38-6)	
Listed on the Canadian DSL (Domestic Substances List)	
Aluminum (7429-90-5)	
Listed on the Canadian DSL (Domestic Substances List)	

EU-Regulations

Contains no REACH candidate substance

National regulations

No additional information available

15.3. US State regulations

MARNING: This product can expose you to Epichlorohydrin, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Component	State or local regulations
Aluminum(7429-90-5)	U.S Massachusetts - Right To Know List; U.S New Jersey - Right to Know Hazardous Substance List; U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

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

 Revision date
 : 11/04/2022

 Full text of H-phrases:
 H315

 Causes skin irritation

H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H401	Toxic to aquatic life

SDS US - ResinLab

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.