Armstrong Activator W

Safety Data Sheet

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

Date of issue: 02/20/2020 Version: 1.0

SECTION 1: Identification

1.1. Identification

Trade name : Armstrong Activator W

1.2. Recommended use and restrictions on use

Recommended use : Epoxy hardener

Restrictions on use : Product for industrial use only

1.3. Supplier

ResinLab, LLC
N109 W13300 Ellsworth Drive
Germantown, WI 53022 - United States
T:1-877-259-1669

Armstrong™ is a trademark of Henkel and its affiliates in the US and elsewhere, and used under license.
Product manufactured under license from Henkel.

1.4. Emergency telephone number

Emergency number : CHEMTREC:1-800-424-9300 (USA); +1 703-527-3887 (International)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Skin corrosion/irritation, Category 1B	H314	Causes severe skin burns and eye damage.
Skin sensitisation, Category 1	H317	May cause an allergic skin reaction.

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US) :

Signal word (GHS US) : Danger

Hazard statements (GHS US) : H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.

Precautionary statements (GHS US) : P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapours/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.
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting.
P302+P352 - If on skin: Wash with plenty of water.
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Polyamide Resin	(CAS-No.) 68410-23-1	>= 90	Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317
Triethylenetetramine	(CAS-No.) 112-24-3	5 - 10	Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Skin Sens. 1, H317

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 general : Get medical advice/attention if you feel unwell.

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

First-aid measures after skin contact : Rinse immediately with plenty of water for 15 minutes. Take off immediately all contaminated clothing. Call a physician immediately.

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. Call a physician immediately.

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

4.2. Most important symptoms and effects (acute and delayed)

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

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

No additional information available

5.3. Special protective equipment and precautions for fire-fighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray.

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 containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material.

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station, curing ovens must be ventilated to prevent emissions in the workplace. Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Wear personal protective equipment.

Hygiene measures : Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Polyamide Resin (68410-23-1)
Not applicable

Triethylenetetramine (112-24-3)
Not applicable

8.2. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station, curing ovens must be ventilated to prevent emissions in the workplace.

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses with side shields

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Colour	:	amber
Odour	:	Ammonia-like
Odour threshold	:	No data available
pH	:	No data available
Melting point	:	Not applicable
Freezing point	:	No data available
Boiling point	:	> 200 °C
Flash point	:	> 180 °C
Relative evaporation rate (butylacetate=1)	:	No data available
Flammability (solid, gas)	:	Not applicable.
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	0.98 g/cm³

Solubility	:	No data available
Log Pow	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity, dynamic	:	No data available
Explosive limits	:	No data available
Explosive properties	:	No data available
Oxidising 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

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Acids. Oxidizing agent.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified
Acute toxicity (dermal)	:	Not classified
Acute toxicity (inhalation)	:	Not classified

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

Skin corrosion/irritation	:	Causes severe skin burns and eye damage.
Serious eye damage/irritation	:	Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	:	May cause an allergic skin reaction.
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	Not classified
Reproductive toxicity	:	Not classified
STOT-single exposure	:	Not classified
STOT-repeated exposure	:	Not classified
Aspiration hazard	:	Not classified
Symptoms/effects after skin contact	:	Burns. May cause an allergic skin reaction.
Symptoms/effects after eye contact	:	Serious damage to eyes.
Symptoms/effects after ingestion	:	Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Before neutralisation, the product may represent a danger to aquatic organisms.

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

12.2. Persistence and degradability

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

12.3. Bioaccumulative potential

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

12.4. Mobility in soil

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

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. 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

Transport document description : UN2735 Polyamines, liquid, corrosive, n.o.s. (Polyamide Resin ; Triethylenetetramine), 8, II
UN-No.(DOT) : UN2735
Proper Shipping Name (DOT) : Polyamines, liquid, corrosive, n.o.s.
Polyamide Resin ; Triethylenetetramine
Class (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136
Packing group (DOT) : II - Medium Danger
Hazard labels (DOT) : 8 - Corrosive

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

DOT Special Provisions (49 CFR 172.102)	:	B2 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks are not authorized. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / (1 + a (tr - tf)) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx)	:	154
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	30 L
DOT Vessel Stowage Location	:	A - The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel.
DOT Vessel Stowage Other	:	52 - Stow ‘‘separated from’’ acids
Emergency Response Guide (ERG) Number	:	153
Other information	:	No supplementary information available.

Transportation of Dangerous Goods

Not applicable

Transport by sea

Transport document description (IMDG)	:	UN 2735 AMINES, LIQUID, CORROSIVE, N.O.S. (Polyamide Resin ; Triethylenetetramine), 8, II
UN-No. (IMDG)	:	2735 AMINES, LIQUID, CORROSIVE, N.O.S. Polyamide Resin ; Triethylenetetramine
Class (IMDG)	:	8 - Corrosive substances
Packing group (IMDG)	:	II - substances presenting medium danger

Air transport

Transport document description (IATA)	:	UN 2735 Amines, liquid, corrosive, n.o.s. (Polyamide Resin ; Triethylenetetramine), 8, II
UN-No. (IATA)	:	2735
Proper Shipping Name (IATA)	:	Amines, liquid, corrosive, n.o.s. Polyamide Resin ; Triethylenetetramine
Class (IATA)	:	8 - Corrosives
Packing group (IATA)	:	II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

Polyamide Resin (68410-23-1)	
Listed 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).

Triethylenetetramine (112-24-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Polyamide Resin (68410-23-1)
Listed on the Canadian DSL (Domestic Substances List)

Triethylenetetramine (112-24-3)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
Contains no substance on the REACH candidate list

National regulations
No additional information available

15.3. US State regulations

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

Component	State or local regulations
Triethylenetetramine(112-24-3)	U.S. - 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

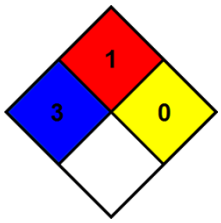
Full text of H-statements:

H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

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

Flammability : 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

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.