

Safety Data Sheet

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

Issue date: 03/04/2020 Revision date: 01/13/2022 Supersedes: 01/13/2022

Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Armstrong A-2

1.2. Recommended use and restrictions on use

Recommended use : Epoxy resin

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

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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 2 Serious eye damage/eye irritation Category 2

Skin sensitization, Category 1

H315 Causes skin irritation
H319 Causes serious eye irritation

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 labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning

Hazard statements (GHS US) : H315 - Causes skin irritation

H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation

Precautionary 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. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse.

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

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
aluminum oxide	(CAS-No.) 1344-28-1	30 – 50	Not classified
Polymer of Epoxy resin and Bisphenol-A	(CAS-No.) 25036-25-3	30 – 50	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 Skin Sens. 1, H317
Epoxy resin	(CAS-No.) 28064-14-4	5 – 10	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
aluminum hydroxide	(CAS-No.) 21645-51-2	5 – 10	Not classified
Epoxy Resin	(CAS-No.) 25068-38-6	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 2, H401 Aquatic Chronic 2, H411
hexamethylene diacrylate	(CAS-No.) 13048-33-4	1 – 5	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412
Titanium dioxide	(CAS-No.) 13463-67-7	0.5 – 1	Aquatic Acute 3, H402

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. If skin irritation or rash occurs:

Get medical advice/attention.

First-aid measures after eye contact : Rinse immediately with plenty of water. 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. Call a poison center/doctor/physician if you feel unwell.

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

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

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.

Unsuitable extinguishing media : Do not use water jet to extinguish.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of : Toxic fumes may be released

tire

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. Avoid breathing

dust/fume/gas/mist/vapors/spray.

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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

Additional hazards when processed

: Contains a component(s) that is encapsulated within the product and not expected to be released during normal processing conditions or a foreseeable emergency. 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. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Wear personal protective equipment.

Hygiene measures

Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. 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

Armstrong A-2		
ACGIH	Local name	Epichlorohydrin
ACGIH	ACGIH OEL TWA	10 mg/m³
ACGIH	ACGIH OEL TWA [ppm]	0.5 ppm
ACGIH	Remark (ACGIH)	TLV® Basis: URT irr; male repro. Notations: Skin; A3 (Confirmed Animal Carcinogen with Unknown Relevance to Humans)
ACGIH	Regulatory reference	ACGIH 2021
OSHA	OSHA PEL (TWA) [1]	5 mg/m³ (Respirable fraction) 15 mg/m³ (Total dust)
OSHA	OSHA PEL (TWA) [2]	5 ppm
OSHA	Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

Epoxy resin (28064-14-4)

Not applicable

aluminum hydroxide (21645-51-2)

ACGIH ACGIH OEL TWA 1 mg/m³ (Respirable fraction)

Polymer of Epoxy resin and Bisphenol-A (25036-25-3)

Not applicable

TOTAL TOTAL		
Titanium dioxide (13463-67-7)		
ACGIH	Local name	Titanium dioxide
ACGIH	ACGIH OEL TWA	10 mg/m³
ACGIH	Remark (ACGIH)	TLV® Basis: LRT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
ACGIH	Regulatory reference	ACGIH 2020
OSHA	OSHA PEL (TWA) [1]	15 mg/m³

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Titanium dioxide (13463-67-7)			
OSHA Regulatory reference (US-OSHA) OSHA Annotate		OSHA Annotated Table Z-1	
Epoxy Resin (25068-38-6)	Epoxy Resin (25068-38-6)		
Not applicable	Not applicable		
hexamethylene diacrylate (13048-33-4)			
Not applicable			
aluminum oxide (1344-28-1)			
ACGIH	ACGIH OEL TWA	1 mg/m³ (Respirable fraction)	
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

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

Personal protective equipment symbol(s):



Relative density





SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Off White
Odor : mild

Odor threshold : No data available рΗ : No data available Melting point : Not applicable Freezing point : No data available Boiling point : No data available : > 93.33 °C Flash point Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Not applicable. Vapor pressure : No data available Relative vapor density at 20 °C : No data available

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: No data available

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Density : 1.88 g/cm³ 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

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. Bases (Alkalis). Oxidizing agent. Ethylene oxide. Chlorine trifluoride.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Carbon oxides (CO, CO2). Phenolic compounds.

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

aluminum hydroxide (21645-51-2)		
LD50 oral rat	> 2000 mg/kg body weight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))	
LC50 Inhalation - Rat	> 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Read-across, Inhalation (aerosol), 14 day(s))	
Polymer of Epoxy resin and Bisphenol-A (25036-25-3)		
LD50 oral rat	> 2000 mg/kg (Rat, Oral)	
Titanium dioxide (13463-67-7)		
LD50 oral rat	> 2000 mg/kg body weight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))	
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))	
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))	
hexamethylene diacrylate (13048-33-4)		
LD50 oral rat	> 5000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)	
LD50 dermal rabbit	3650 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	

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Epoxy resin (28064-14-4)

LC50 - Fish [1]

aluminum oxide (1344-28-1)	
LD50 oral rat	> 15900 mg/kg body weight (Equivalent or similar to OECD 401, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 2.3 mg/l air (Equivalent or similar to OECD 403, 4 h, Rat, Male / female, Experimental value Inhalation (aerosol), 14 day(s))
Skin 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
Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans
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: toxicity (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
toproductive toxiony	. Hot bladdinga
Ç ,	: Not classified
STOT-single exposure STOT-repeated exposure	: Not classified : Not classified
STOT-repeated exposure aluminum hydroxide (21645-51-2)	: Not classified
STOT-repeated exposure	: Not classified
STOT-repeated exposure aluminum hydroxide (21645-51-2) NOAEC (inhalation,rat,dust/mist/fume,90 days)	: Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-
STOT-repeated exposure aluminum hydroxide (21645-51-2)	: Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-
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Aluminum hydroxide (21645-51-2) NOAEC (inhalation,rat,dust/mist/fume,90 days) Epoxy Resin (25068-38-6) NOAEL (oral,rat,90 days) hexamethylene diacrylate (13048-33-4) NOAEL (oral,rat,90 days)	Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study) 50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals 250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated
Aluminum hydroxide (21645-51-2) NOAEC (inhalation,rat,dust/mist/fume,90 days) Epoxy Resin (25068-38-6) NOAEL (oral,rat,90 days) hexamethylene diacrylate (13048-33-4)	Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90 Day Study) 50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals 250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
Aluminum hydroxide (21645-51-2) NOAEC (inhalation,rat,dust/mist/fume,90 days) Epoxy Resin (25068-38-6) NOAEL (oral,rat,90 days) hexamethylene diacrylate (13048-33-4) NOAEL (oral,rat,90 days) aluminum oxide (1344-28-1)	Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90 Day Study) 50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals 250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) 0.015 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
Aluminum hydroxide (21645-51-2) NOAEC (inhalation,rat,dust/mist/fume,90 days) Epoxy Resin (25068-38-6) NOAEL (oral,rat,90 days) hexamethylene diacrylate (13048-33-4) NOAEL (oral,rat,90 days) aluminum oxide (1344-28-1) LOAEC (inhalation,rat,dust/mist/fume,90 days)	Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90 Day Study) 50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals 250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) 0.015 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies) 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90
Aspiration hazard	Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90 Day Study) 50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodents Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals 250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) 0.015 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies) 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90 Day Study)
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Aspiration hazard STOT-repeated exposure aluminum hydroxide (21645-51-2) NOAEC (inhalation,rat,dust/mist/fume,90 days) Epoxy Resin (25068-38-6) NOAEL (oral,rat,90 days) hexamethylene diacrylate (13048-33-4) NOAEL (oral,rat,90 days) aluminum oxide (1344-28-1) LOAEC (inhalation,rat,dust/mist/fume,90 days) Aspiration hazard Symptoms/effects after skin contact ECTION 12: Ecological information	Not classified 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90 Day Study) 50 mg/kg body weight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents), Guideline: EPA OPPTS 870.3100 (90-Day Oral Toxicity in Rodent Guideline: EU Method B.26 (Sub-Chronic Oral Toxicity Test: Repeated Dose 90-Day Oral Toxicity Study in Rodents), Guideline: other:japanese MITI guidelines for toxicity testing of chemicals 250 mg/kg body weight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) 0.015 mg/l air Animal: rat, Guideline: OECD Guideline 452 (Chronic Toxicity Studies) 0.07 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90 Day Study) Not classified

EC50 - Other aquatic organisms [1] 01/13/2022 EN (English US) 6/10

5.7 mg/l

3.5 mg/l

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aluminum hydroxide (21645-51-2)		
LC50 - Fish [1]	> 218 mg/l (US EPA, 96 h, Pimephales promelas, Semi-static system, Fresh water, Experimental value of similar product, Aluminium)	
Polymer of Epoxy resin and Bisphenol-A (25036-25-3)		
LC50 - Fish [1]	> 100 mg/l (Pisces, Estimated value)	
EC50 - Crustacea [1]	> 100 mg/l (Invertebrata, Estimated value)	
Titanium dioxide (13463-67-7)		
LC50 - Fish [1]	> 100 mg/l (Equivalent or similar to OECD 203, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Experimental value, Nominal concentration)	
EC50 - Crustacea [1]	19.3 mg/l Test organisms (species): Daphnia magna	
EC50 - Other aquatic organisms [1]	> 100 mg/l Test organisms (species):	
EC50 - Crustacea [2]	27.8 mg/l Test organisms (species): Daphnia magna	
ErC50 algae	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)	
LOEC (chronic)	5 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	≥ 2.92 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
Epoxy Resin (25068-38-6)		
EC50 - Crustacea [1]	≈ 2 mg/l Test organisms (species): Daphnia magna	
LOEC (chronic)	1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
NOEC (chronic)	0.3 mg/l Test organisms (species): Daphnia magna Duration: '21 d'	
hexamethylene diacrylate (13048-33-4)		
LC50 - Fish [1]	4.6 – 10 mg/l Test organisms (species): Leuciscus idus	
EC50 - Crustacea [1]	2.6 mg/l Test organisms (species): Daphnia magna	
aluminum oxide (1344-28-1)		
LC50 - Fish [1]	> 100 mg/l	
EC50 - Crustacea [1]	> 100 mg/l (48 h, Daphnia magna, Literature study)	
2.2. Persistence and degradability		
Epoxy resin (28064-14-4)		

Epoxy resin (28064-14-4)		
Persistence and degradability	Biodegradability in soil: no data available.	
aluminum hydroxide (21645-51-2)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	
Polymer of Epoxy resin and Bisphenol-A (250	36-25-3)	
Persistence and degradability	Not readily biodegradable in water.	
Titanium dioxide (13463-67-7)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	
Epoxy Resin (25068-38-6)		
Persistence and degradability	Not readily biodegradable in water.	
aluminum oxide (1344-28-1)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	
BOD (% of ThOD)	Not applicable	

12.3. **Bioaccumulative potential**

Epoxy resin (28064-14-4)	
Bioaccumulative potential	No bioaccumulation data available.

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aluminum hydroxide (21645-51-2)	
Bioaccumulative potential	Not bioaccumulative.
Polymer of Epoxy resin and Bisphenol-A (25036-25-3)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6 (Calculated)
Bioaccumulative potential	Not bioaccumulative.
Titanium dioxide (13463-67-7)	
Bioaccumulative potential	Not bioaccumulative.
Epoxy Resin (25068-38-6)	
BCF - Other aquatic organisms [1]	31 (Estimated value, Fresh weight)
Partition coefficient n-octanol/water (Log Pow)	3 (Estimated value, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
aluminum oxide (1344-28-1)	
Bioaccumulative potential	Not bioaccumulative.

12.4. Mobility in soil

aluminum hydroxide (21645-51-2)		
, ,		
Ecology - soil	No (test)data on mobility of the substance available.	
Titanium dioxide (13463-67-7)		
Surface tension	No data available in the literature	
Ecology - soil	Low potential for mobility in soil.	
Epoxy Resin (25068-38-6)		
Surface tension	59 mN/m (20 °C, 0.09 g/l)	
Organic Carbon Normalized Adsorption Coefficient (Log Koc)	2.65 (log Koc, SRC PCKOCWIN v2.0, QSAR)	
Ecology - soil	Low potential for adsorption in soil.	
aluminum oxide (1344-28-1)		
Surface tension	No data available in the literature	
Ecology - soil	No (test)data on mobility of the substance available.	

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

Not regulated

Transportation of Dangerous Goods

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

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SECTION 15: Regulatory information

15.1. US Federal regulations

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

aluminum oxide CAS-No. 1344-28-1 30 – 50%

Epoxy resin (28064-14-4)

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).

aluminum hydroxide (21645-51-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Polymer of Epoxy resin and Bisphenol-A (25036-25-3)

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).

Titanium dioxide (13463-67-7)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Epoxy Resin (25068-38-6)

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).

hexamethylene diacrylate (13048-33-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

aluminum oxide (1344-28-1)

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

Epoxy resin (28064-14-4)

Listed on the Canadian DSL (Domestic Substances List)

aluminum hydroxide (21645-51-2)

Listed on the Canadian DSL (Domestic Substances List)

Polymer of Epoxy resin and Bisphenol-A (25036-25-3)

Listed on the Canadian DSL (Domestic Substances List)

Titanium dioxide (13463-67-7)

Listed on the Canadian DSL (Domestic Substances List)

Epoxy Resin (25068-38-6)

Listed on the Canadian DSL (Domestic Substances List)

hexamethylene diacrylate (13048-33-4)

Listed on the Canadian DSL (Domestic Substances List)

aluminum oxide (1344-28-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

Contains no REACH candidate substance

National regulations

Titanium dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations



This product can expose you to 1-chloro-2,3-epoxypropane, 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.

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Component	State or local regulations
Titanium dioxide(13463-67-7)	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
aluminum oxide(1344-28-1)	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

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Revision date : 01/13/2022

Full text of H-phrases:

in text of the principle.	
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H401	Toxic to aquatic life
H402	Harmful to aquatic life
H411	Toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

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.

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