

advised against

Safety Data Sheet

prepared to UN GHS Revision 3

1. Identification of the Substance/Mixture and the Company/Undertaking

1.1 Product Identifier 214-FLOWTEX-A(POLYGENE) Revision Date: 05/23/2018

FORMULA

Product Name: Flowtex/Flowshield- Supercedes Date: 04/18/2018

(POLYGIENE)Base A

1.2 Relevant identified uses of the substance or mixture and uses

Base component of 2 components coating - Industrial use.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Flowcrete North America, Inc.

616 Spring Hill Drive, Suite 100

Spring, TX 77386 americas@flowcrete.com www.flowcreteamericas.com

Tel: (936) 539-6700 Fax: (936) 539-6701

Datasheet Produced by: Mims, Robert - americas@flowcrete.com

1.4 Emergency telephone number: CHEMTREC 1-800-424-9300 (Inside US)

CHEMTREC +1 703 5273887 (Outside ÚS)

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 4
Hazardous to the aquatic environment, Chronic, category 2
Carcinogenicity, category 1B
Eye Irritation, category 2
Germ Cell Mutagenicity, category 1B
Skin Irritation, category 2
Skin Sensitizer, category 1

2.2 Label elements

Date Printed: 05/23/2018

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

Benzyl alcohol, Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700), Solvent naphtha (petroleum), light arom., Oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

HAZARD STATEMENTS

| Skin Irritation, category 2 | H315 | Causes skin irritation. |
|--|---------|--|
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |
| Eye Irritation, category 2 | H319 | Causes serious eye irritation. |
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled. |
| Germ Cell Mutagenicity, category 1B | H340-1B | May cause genetic defects. |
| Carcinogenicity, category 1B | H350-1B | May cause cancer. |
| Hazardous to the aquatic environment, Chronic, category 2 | H411 | Toxic to aquatic life with long lasting effects. |

PRECAUTION PHRASES

| P201 | Obtain special instructions before use. |
|--------------|---|
| P202 | Do not handle until all safety precautions have been read and understood. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/ face protection. |
| P284 | Wear respiratory protection. |
| P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304+340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+351+338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. |
| P308+313 | IF exposed or concerned: Get medical advice/attention. |
| P333+313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P391 | Collect spillage. |
| | |

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

| CAS-No. | <u>Chemical Name</u> | <u>%</u> |
|------------|---|----------|
| 25068-38-6 | Reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 75-100 |
| 68609-97-2 | Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | 2.5-10 |

 100-51-6
 Benzyl alcohol
 2.5-10

 64742-95-6
 Solvent naphtha (petroleum), light arom.
 0.1-1.0

| CAS-No. | GHS Symbols | GHS Hazard Statements | M-Factors |
|------------|-------------------------|------------------------------|-----------|
| 25068-38-6 | GHS07-GHS09 | H315-317-319-411 | 0 |
| 68609-97-2 | GHS07 | H315-317 | 0 |
| 100-51-6 | GHS07 | H302-312-319-332 | 0 |
| 64742-95-6 | GHS02-GHS07-GHS08-GHS09 | H226-304-315-336-340-350-411 | 0 |

Additional Information: The text for GHS Hazard Statements shown above (if any) is given in Section 16.

4. First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: When symptoms persist or in all cases of doubt seek medical advice.

AFTER INHALATION: Move to fresh air. Consult a physician after significant exposure.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. Give small amounts of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

Self protection of the first aider:

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Irritating to skin. May cause sensitization by skin contact. Prolonged or repeated exposure increases the risk. Harmful to aquatic organisms.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

5. Fire-fighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above.

5.2 Special hazards arising from the substance or mixture

No Information

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. High volume water jet. Hazardous decomposition products formed under fire conditions. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Contains epoxy constituents. See information supplied by the manufacturer.

Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. May cause long-term adverse effects in the aquatic environment.

6.3 Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with non-combustible absorbent material, (e.g.

sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to disposal requirements or country specific disposal requirements for this material. See Section 13 for further information.

7. Handling and Storage

7.1 Precautions for safe handling

INSTRUCTIONS FOR SAFE HANDLING: Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment.

PROTECTION AND HYGIENE MEASURES: Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Extremes of temperature and direct sunlight.

STORAGE CONDITIONS: Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

7.3 Specific end use(s)

No specific advice for end use available.

8. Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(US)

| <u>Name</u> | CAS-No. C | <u>SHAPEL</u> | ACGIH TLV |
|--|------------|---------------|-----------|
| Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700) | 25068-38-6 | | |
| Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | 68609-97-2 | | |
| Benzyl alcohol | 100-51-6 | | |
| Solvent naphtha (petroleum), light arom. | 64742-95-6 | 500.0 PPM | 300.0 PPM |

FURTHER INFORMATION: Refer to the regulatory exposure limits for the workforce enforced in each country.

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: No personal respiratory protective equipment normally required.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Impervious gloves. Long sleeved clothing. Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: No Information

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Transparent resin

Physical State Liquid

Odor Weak epoxy
Odor threshold Not determined

pH Non-aqueous

Melting point / freezing point (°C)

Not determined

Boiling point/range (°C) 150 - N.D.

Flash Point, (°F / °C) >200 F

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive 999 - 0

limits

Vapour PressureNot determinedVapour density1.16 g/cm3

Relative density Not determined

Solubility in / Miscibility with water Insoluble

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Not determined

Not determined

Not determined

Not determined

Not determined

Explosive properties N/A
Oxidising properties N/A

9.2 Other information

VOC Content g/l: 20

Density (lbs./gal) 9.13

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

No decomposition if stored and applied as directed. Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight.

10.5 Incompatible materials

Strong oxidizing agents. Acids and bases.

10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours. Alcohols. Exothermic reaction. Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

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Oral LD50: No information Inhalation LC50: No information

Irritation: Irritating to eyes, skin, mouth and pharynx.

Corrosivity: No information available.

Sensitization: Prolonged or repeated skin contact may result in allergic eczema.

Repeated dose toxicity: No information available.

Carcinogenicity: No information available.

Mutagenicity: No information available.

Toxicity for reproduction: No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

| CAS-No. | <u>Chemical Name</u> | Oral LD50 | Dermal LD50 | Vapor LC50 |
|------------|--|------------------------|--------------------|-----------------------------------|
| 25068-38-6 | Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700) | >2000 mg/kg, rat, oral | >2000 mg/kg, rat | |
| 68609-97-2 | Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | 17100 mg/kg, oral, rat | | |
| 100-51-6 | Benzyl alcohol | 1230 mg/kg, rat | 2000 mg/kg, rabbit | 1000 ppm, 8 hours rat |
| 64742-95-6 | Solvent naphtha (petroleum), light arom. | 4700 mg/kg, oral, rat | >2000 mg/kg | 3670 ppm/8 hours, rat, inhalation |

Additional Information:

No Information

12. Ecological Information

12.1 Toxicity:

EC50 48hr (Daphnia):

IC50 72hr (Algae):

No information

No information

No information

12.2 Persistence and degradability: No information

12.3 Bioaccumulative potential: No information

12.4 Mobility in soil: No information

12.5 Results of PBT and vPvB The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII.

assessment:

12.6 Other adverse effects: No information

| CAS-No. | <u>Chemical Name</u> | EC50 48hr | IC50 72hr | LC50 96hr |
|------------|--|----------------|----------------|--------------|
| 25068-38-6 | Reaction product: bisphenol-A- (epichlorhydrin) epoxy resin (number average molecular weight <= 700) | No information | No information | |
| 68609-97-2 | Oxirane, mono[(C12-14-alkyloxy)methyl] derivs. | No information | No information | |
| 100-51-6 | Benzyl alcohol | 230 mg/l | 700 mg/l | 460 mg/l |
| 64742-95-6 | Solvent naphtha (petroleum), light arom. | >1 - 10 mg/l | >1 - 10 mg/l | >10-100 mg/l |

13. Disposal Considerations

13.1 WASTE TREATMENT METHODS: If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport Information

| 14.1 | UN number | UN3082 |
|------|-------------------------|------------|
| 14 2 | UN proper shipping name | Environmen |

14.2 UN proper shipping name Environmentally Hazardous Substance, Liquid, N.O.S.

Technical name (Epoxy Resin)

14.3 Transport hazard class(es) 9
Subsidiary shipping hazard N/A

14.4 Packing group III

14.5 Environmental hazards Yes

14.6 Special precautions for user Not applicable EmS-No.: F-A, S-F

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Not applicable

15. Regulatory Information

15.1 Safety, health and environmental regulations/legislation for the substance or mixture:

U.S. Federal Regulations: As follows -

CERCLA - Sara Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Carcinogenicity, Acute Toxicity (any route of exposure), Skin Corrosion or Irritation, Respiratory or Skin Sensitization, Serious eye damage or eye irritation, Germ cell mutagenicity

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the U.S. Superfund Amendment and Reauthorization Act (SARA) of 1986 and 40 CFR part 372:

Chemical NameCAS-No.Cumene98-82-8

Toxic Substances Control Act:

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This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. Clean Air Act:

EPA Coating Category: Floor Coatings

EPA VOC Content Limit (g/l): 400
Product VOC Content (g/l) <20
Thinning Recommendations: None

Application Recommendations: For professional use only.

U.S. State Regulations: As follows -

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u> <u>CAS-No.</u>

No Chemical Name Found

Pennsylvania Right-To-Know

The following non-hazardous ingredients are present in the product at greater than 3%.

No PA Right-To-Know components exist in this product.

California Proposition 65:

WARNING: Cancer - www.P65Warnings.ca.gov

International Regulations: As follows -

* Canadian DSL:

H350

All chemical ingredients included on inventory or exempt.

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

Other Information

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

| H226 | Flammable liquid and vapour. |
|------|---|
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H336 | May cause drowsiness or dizziness. |
| H340 | May cause genetic defects. |

May cause cancer.

^{*} As per the federal EPA definition for coating categories in 40 CFR 59.401.

^{**} Grams of VOC per liter of coating product as applied (mixture of Part A and Part B) per ASTM D2369 Method E.

H411 Toxic to aquatic life with long lasting effects.

Date Printed: 05/23/2018

Reasons for revision

Substance and/or Product Properties Changed in Section(s):

02 - Hazard Identification 15 - Regulatory Information Revision Statement(s) Changed

This is a new Safety Data Sheet (SDS).

List of References:

This Safety Data Sheet was compiled with data and information from the following sources:

The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark; European Union Commission Regulation No. 1907/2006 on REACH as amended within Commission Regulation (EU) 2015/830;

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) and subsequent technical progress adaptations (ATP); EU Council Decision 2000/532/EC and its Annex entitled "List of Wastes".

Acronym & Abbreviation Key:

CLP Classification, Labeling & Packaging Regulation

EC European Commission
EU European Union
US United States

CAS Chemical Abstract Service

EINECS European Inventory of Existing Chemical Substances

REACH Registration, Evaluation, Authorization of Chemicals Regulation

GHS Globally Harmonized System of Classification and Labeling of Chemicals

LTEL Long term exposure limit
STEL Short term exposure limit
OEL Occupational exposure limit

ppm Parts per million

mg/m3 Milligrams per cubic meter TLV Threshold Limit Value

ACGIH American Conference of Governmental Industrial Hygienists

OSHA Occupational Safety & Health Administration

PEL Permissible Exposure Limits
VOC Volatile organic compounds

g/l Grams per liter

mg/kg Milligrams per kilogram

N/A Not applicable LD50 Lethal dose at 50%

LC50 Lethal concentration at 50%

EC50 Half maximal effective concentration
IC50 Half maximal inhibitory concentration
PBT Persistent bioaccumulative toxic chemical
vPvB Very persistent and very bioaccumulative

EEC European Economic Community

ADR International Transport of Dangerous Goods by Road RID International Transport of Dangerous Goods by Rail

UN United Nations

IMDG International Maritime Dangerous Goods Code
IATA International Air Transport Association

MARPOL International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978

IBC International Bulk Container RTI Respiratory Tract Irritation

NE Narcotic Effects

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For further information, please contact: Technical Services Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product. It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.

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