

Safety Data Sheet

prepared to UN GHS Revision 3

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

1.1 Product Identifier 203-PRIME-B Revision Date: 03/20/2015

Product Name: Flowprime Hardener B Supercedes Date: 07/31/2014

1.2 Relevant identified uses of the substance or mixture and uses

advised against

 $Component \ of \ multicomponent \ industrial \ coatings-Industrial \ use.$

1.3 Details of the supplier of the safety data sheet

Manufacturer: Flowcrete North America, Inc.

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Spring, TX 77386

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

Datasheet Produced by: Anderson, Paul - americas@ flowcrete.com

1.4 Emergency telephone number: CHEMTREC +1 703 5273887 (Outside US)

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Oral, category 4
Acute Toxicity, Inhalation, category 4
Hazardous to the aquatic environment, Chronic, category 3
Skin Corrosion, category 1
Skin Sensitizer, category 1

2.2 Label elements

Symbol(s) of Product



Signal Word

Danger

Named Chemicals on Label

benzyl alcohol, benzene-1, 3-dimethanamine, 3-aminomethyl-3,5,5-trimethylcyclohexylamine

HAZARD STATEMENTS

| Acute Toxicity, Oral, category 4 | H302 | Harmful if swallowed. |
|--|--------------|---|
| Acute Toxicity, Inhalation, category 4 | H332 | Harmful if inhaled. |
| Hazardous to the aquatic environment, | H412 | Harmful to aquatic life with long lasting effects. |
| Chronic, category 3 | | |
| Skin Corrosion, category 1 | H314-1 | Causes severe skin burns and eye damage. |
| Skin Sensitizer, category 1 | H317 | May cause an allergic skin reaction. |
| PRECAUTION PHRASES | | |
| | P260 | Do not breathe dust/fume/gas/mist/vapours/spray. |
| | P264 | Wash hands thoroughly after handling. |
| | P270 | Do no eat, drink or smoke when using this product |
| | P273 | Avoid release to the environment |
| | P280 | Wear protective gloves/protective clothing/eye protection/ |
| | | face protection. |
| | P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| | P303+361+353 | IF ON SKIN (or hair): Remove/Take offimmediately all |
| | | contaminated clothing. Rinse skin with water/shower. |
| | P304+340 | IF INHALED: Remove victim to fresh air and keep at rest in |
| | | a position comfortable for breathing. |
| | P333+313 | If skin irritation or rash occurs: Get medical advice /attention. |

23 Other hazards

Not applicable

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT $\ensuremath{\mathcal{N}}$ PvB in accordance with Annex XIII.

3. Composition/Information On Ingredients

3.2 Mixtures

Hazardous Ingredients

| CAS-No. | <u>Chemical Name</u> | <u>%</u> |
|-----------|--|----------|
| 2855-13-2 | 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 10-25 |
| 100-51-6 | benzyl alcohol | 10-25 |
| 1477-55-0 | benzene-1, 3-dimethanamine | 10-25 |
| | | |

| CAS-No. | GHS Symbols | GHS Hazard Statements | M-Factors |
|----------|-------------|-----------------------|-----------|
| 100-51-6 | GHS07 | H302-319-332 | 0 |

2855-13-2 GHS05-GHS07 H302-312-314-317-412 0 1477-55-0 GHS05-GHS06 H302-314-317-331-412 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.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses.

AFTER INGESTION: Gently wipe or rinse the inside of the mouth with water. 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

Causes severe burns. Harmful in contact with skin and if swallowed. Irritating to eyes and respiratory system.

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.

6. 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.

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. Do not breathe vapours or spray mist.

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: Direct sources of heat

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> | <u>%</u> | <u>OSHAPEL</u> | Company | |
|--|----------|----------------|---------|--|
| 3-aminomethyl-3,5,5-trimethylcyclohexylamine | 10-25 | | ILV | |

benzyl alcohol 10-25 benzene-1, 3-dimethanamine 10-25

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

8.2 Exposure controls

Personal Protection

Odor threshold

RESPIRATORY PROTECTION: Respirator with filter for organic vapor.

EYE PROTECTION: Safety glasses.

HAND PROTECTION: Rubber or plastic gloves. Long sleeved clothing. Remove and wash contaminated clothing before reuse. Rubber or plastic apron.

OTHER PROTECTIVE EQUIPMENT: No Information

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

Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance: Light Yellow - Clear

Physical State Liquid

Odor Amine Like

pH 11-12

Welting point / freezing point (°C)Not determined

Not determined

Boiling point/range (°C) 302 F - N.D.

Flash Point, (°C) 93

Evaporation rate Not determined

Flammability (solid, gas) Not determined

Upper/lower flammability or explosive 999 - 0

limits

Vapour PressureNot determinedVapour densityca. 1.05 g/cm3Relative densityNot determined

Solubility in / Miscibility with water Limited

Partition coefficient: n-octanol/water

Auto-ignition temperature (°C)

Not determined

Not determined

Not determined

Not determined

Not determined

Explosive properties N/A

Oxidising properties Not determined

9.2 Other information

VOC Content g/l: 12
Specific Gravity (g/cm3) 0.120

10. Stability and Reactivity

10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerisation may occur.

10.4 Conditions to avoid

Direct sources of heat

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

11. Toxicological Information

11.1 Information on toxicological effects

Acute Toxicity:

Oral LD50:

Inhalation LC50:

Irritation: No information available.

Corrosivity: Causes burns. Dehydrating on skin. Eye contact may cause irreversible damage.

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 |
|-----------|--|----------------------|-------------|---------------------------------|
| 100-51-6 | benzyl alcohol | 1230 mg/kg rat, oral | | 1000 ppm /8 hrs rat, inhalation |
| 2855-13-2 | 3-aminomethyl-3,5,5- trimethylcyclohexylamine | 500 mg/kg oral | | |
| 1477-55-0 | benzene-1, 3-dimethanamine | 1514 mg/kg, oral | | |

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

125 Results of PBT and vPvB

assessment

The product does not meet the criteria for PBT \(PVB \) in accordance with Annex XIII.

12.6 Other adverse effects:

No information

| CAS-No. | <u>Chemical Name</u> | <u>EC50 48hr</u> | <u>IC5072hr</u> | <u>LC 50 96hr</u> |
|-----------|--|------------------|-----------------|-------------------|
| 2855-13-2 | 3-aminomethyl-3,5,5- trimethylcyclohexylamine | No information | No information | |
| 100-51-6 | benzyl alcohol | No information | No information | |
| 1477-55-0 | benzene-1, 3-dimethanamine | No information | No information | |

13. Disposal Considerations

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

14. Transport Information

14.1 UN number UN2735

14.2 UN proper shipping name Amines, Liquid, Corrosive, N.O.S.

Technical name Benzene-1,3-Dimethanamine, 3-aminomethyl-3,5,5,-

trimethylcyclohexylamine

14.3 Transport hazard class(es) 8

Subsidiary shipping hazard N/A

14.4 Packing group PG III

14.5 Environmental hazards RQ 1001 lbs.

14.6 Special precautions for user Not applicable

EmS-No.:

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:

Acute Health Hazard

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.ethylenediamine107-15-3

Toxic Substances Control Act:

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

Chemical NameCAS-No.ethylenediamine107-15-3

U.S. Clean Air Act

EPA Coating Category: Floor Coatings

EPA VOC Content Limit (gI): 400 Product VOC Content (gI) 12 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%.

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

No Chemical Name Found

California Proposition 65:

Warning: The following ingredients present in the product are known to the State of California to cause cancer:

No Proposition 65 Carcinogens exist in this product

Warning: The following ingredients present in the product are known to the State of California to cause birth defects, or other reproductive hazards.

No Proposition 65 Reproductive Toxins exist in this product

International Regulations: As follows -

* Canadian DSL:

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.

16. Other Information

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

H302 Harmful if swallowed.
H312 Harmful in contact with skin.

^{*} 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.

H314 Causes severe skin burns and eye damage.

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

H331 Toxic if inhaled. H332 Harmful if inhaled.

H412 Harmful to aquatic life with long lasting effects.

Reasons for revision

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

ESIS (The European Chemical Substances Information System), provided by the European Commission

Joint Research Centre in Ispra, Italy

Annex VI of the EU Council Directive 67/548/EEC

Council Directive 67/548/EEC - Annex I or EU Council Directive 1999/45/EC

European Union (EC) Regulation No. 1272/2008 on the classification, labelling and packaging of

substances and mixtures (CLP Regulation)

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

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.