

Safety Data Sheet

prepared to UN GHS Revision 3

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

| 1.1 1.2 | Product Identifier Product Name: Relevant identified uses of the substance or mixture and uses advised against | 104-FFACC-A-FORMULA Flowfresh Accelerator Base component of 2 components co | Revision Date: Supercedes Date: ating - Industrial use. | 05/23/2018 04/18/2018 |
|------------|--|--|---|--------------------------|
| 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.c | om | |
| 1.4 | Emergency telephone number: | CHEMTREC 1-800-424-9300 (Inside CHEMTREC +1 703 5273887 (Outsid | , | |

2. Hazard Identification

2.1 Classification of the substance or mixture

Acute Toxicity, Inhalation, category 4 Acute Toxicity, Oral, category 4

2.2 Label elements

Symbol(s) of Product



Signal Word Warning

Named Chemicals on Label

dibutyltin dilaurate, Pentane-2,4-dione

HAZARD STATEMENTS

| Acute Toxicity, Oral, category 4 Acute Toxicity, Inhalation, category 4 PRECAUTION PHRASES | H302 H332 | Harmful if swallowed. Harmful if inhaled. |
|---|------------------|---|
| | P261 P264 | Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. |
| | P270 P304+340 | Do no eat, drink or smoke when using this product. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |

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

| <u>CAS-No.</u> | <u>Chemical Name</u> | | <u>%</u> |
|----------------|-------------------------|------------------------------------|-----------|
| 123-54-6 | Pentane-2,4-dione | | 2.5-10 |
| 77-58-7 | dibutyltin dilaurate | | 0.1-1.0 |
| <u>CAS-No.</u> | GHS Symbols | GHS Hazard Statements | M-Factors |
| 123-54-6 | GHS02-GHS06 | H226-301-311-331 | |
| 77-58-7 | GHS05-GHS06-GHS08-GHS09 | H301-314-317-341-360FD-370-400-410 | 1 |

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: No Information AFTER INHALATION: Move to fresh air. AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water. AFTER EYE CONTACT: Rinse thoroughly with plenty of water, also under the eyelids. 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

Do not ingest. May be harmful by inhalation, in contact with skin and if swallowed.

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, Water Fog

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. None.

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

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: No Information STORAGE CONDITIONS: Do not freeze. Keep containers tightly closed in a dry, cool and well-ventilated place.

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. | <u>OSHAPEL</u> | ACGIH TLV |
|----------------------|----------|----------------|-----------|
| Pentane-2,4-dione | 123-54-6 | | |
| dibutyltin dilaurate | 77-58-7 | 0.10 mg/m3 | 0.1 mg/m3 |

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: Protective 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. F | 9. Physical and Chemical Properties | | | |
|------|---|-----------------|--|--|
| 9.1 | Information on basic physical and chemical properties Appearance: | White resin | | |
| | Physical State | | | |
| | - | Liquid | | |
| | Odor | Light terpene | | |
| | Odor threshold | Not determined | | |
| | pH | 9.4 | | |
| | Melting point / freezing point (°C) | 0 (like water) | | |
| | Boiling point/range (°C) | 140 - N.D. | | |
| | Flash Point, (°F / °C) | N/A | | |
| | Evaporation rate | Like water | | |
| | Flammability (solid, gas) | Not determined | | |
| | Upper/lower flammability or explosive limits | 0 - 0 | | |
| | Vapour Pressure | Not determined | | |
| | Vapour density | Not determined | | |
| | Relative density | approx. 1.0 | | |
| | Solubility in / Miscibility with water | Emulsifiable | | |
| | Partition coefficient: n-octanol/water | Not determined | | |
| | Auto-ignition temperature (°C) | N/A | | |
| | Decomposition temperature (°C) | Not determined | | |
| | Viscosity | 850 mPas at 80F | | |
| | Explosive properties | N/A | | |
| | Oxidising properties | N/A | | |
| 9.2 | Other information | | | |
| | VOC Content g/l: | 10 | | |
| | Density (lbs./gal) | 8.03 | | |
| | | | | |

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 does not occur.

10.4 Conditions to avoid No Information

10.5 Incompatible materials No Information

10.6 Hazardous decomposition products No Information

| 11.1 Information on toxicologica | Information on toxicological effects | | | |
|----------------------------------|--------------------------------------|--|--|--|
| Acute Toxicity: | | | | |
| Oral LD50: | No information | | | |
| Inhalation LC50: | No information | | | |
| Irritation: | No information available. | | | |
| Corrosivity: | No information available. | | | |
| Sensitization: | No information available. | | | |
| 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. | Chemical Name | Oral LD50 | Dermal LD50 | Vapor LC50 |
|----------|----------------------|----------------------|-------------|-----------------------|
| 123-54-6 | Pentane-2,4-dione | 55 mg/kg oral, rat | | 10 mg/24 hours rabbit |
| 77-58-7 | dibutyltin dilaurate | 175 mg/kg, oral, rat | | |

Additional Information:

No Information

12. Ecological Information

12.1 Toxicity:

| | - | |
|------|--|--|
| | EC50 48hr (Daphnia): IC50 72hr (Algae): | No information No information |
| | LC50 96hr (fish): | 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 assessment: | The product does not meet the criteria for PBT/VPvB in accordance with Annex XIII. |
| | | |

12.6 Other adverse effects:

| CAS-No. | Chemical Name | <u>EC50 48hr</u> | <u>IC50 72hr</u> | <u>LC50 96hr</u> |
|----------|----------------------|------------------|------------------|------------------|
| 123-54-6 | Pentane-2,4-dione | No information | No information | |
| 77-58-7 | dibutyltin dilaurate | 2.28 mg/l | No information | 2 mg/l |

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 | Not applicable |
| 14.2 | UN proper shipping name | Not regulated for transport according to DOT, IMDG and IATA regulations |
| | Technical name | Not applicable |
| 14.3 | Transport hazard class(es) | Not applicable |
| | Subsidiary shipping hazard | Not applicable |
| 14.4 | Packing group | Not applicable |
| 14.5 | Environmental hazards | Not applicable |
| 14.6 | Special precautions for user | Not applicable |
| | EmS-No.: | Not applicable |
| 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 Toxicity (any route of exposure)

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:

No Sara 313 components exist in this product.

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 Name

Pentane-2,4-dione

CAS-No. 123-54-6

U.S. Clean Air Act:

| EPA Coating Category: | Floor coatings |
|------------------------------|----------------------------|
| EPA VOC Content Limit (g/l): | 400 |
| Product VOC Content (g/l) | 10 |
| Thinning Recommendations: | None |
| Application Recommendations: | For professional use only. |

* 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.

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.

| Chemical Name | CAS-No. |
|----------------------------|-----------|
| castor oil | 8001-79-4 |
| No Chemical Name Found | |
| Pennsylvania Right-To-Know | |

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

| Chemical Name | CAS-No. | |
|----------------------------|-----------|--|
| castor oil | 8001-79-4 | |
| California Proposition 65: | | |

No Proposition 65 Chemicals 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:

| H226 | Flammable liquid and vapour. |
|--------|---|
| H301 | Toxic if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H317 | May cause an allergic skin reaction. |
| H331 | Toxic if inhaled. |
| H341 | Suspected of causing genetic defects. |
| H360FD | May damage fertility. May damage the unborn child. |
| H370 | Causes damage to organs. |
| H400 | Very toxic to aquatic life. |
| H410 | Very 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
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 | |
| | | |

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.