33676-XXXX SDS Feb. 2015, rev\_2



# Safety Data Sheet

### 1. PRODUCT AND COMPANY IDENTIFICATION

| Product name         | CoraFoam® (Dry FoM)   |
|----------------------|---|
| CAS number           | Mixture   |
| Product type and use | Rigid expanded polyurethane modified polyisocyanurate foam for thermal insulation |
| Company              | FloraCraft Corporation<br>1 W Longfellow Place<br>Ludington, MI 49431             |

In case of emergency call CHEMTREC 1-800-424-9300 (24 HOURS DAY, 7 DAYS A WEEK)

#### 2. HAZARDS IDENTIFICATION

| Physical state  | Solid   |  |
|---|---|--|
| Appearance  | Rigid foam  |  |
| Emergency overview  | Low hazard for usual industrial or commercial handling  |  |
| OSHA regulatory status  | This product is considered NOT hazardous under OSHA Hazard Communication Standard (29 CFR 1910.1200).               |  |
| Potential health effects  |   |  |
| Eyes  | Dust may irritate the eyes.   |  |
| Skin  | Nonirritating. May cause irritation only through mechanical abrasion.   |  |
| Inhalation  | Dust may irritate the respiratory system.   |  |
| Ingestion   | May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure. |  |
| Target organs   | Inhalation<br>Skin<br>Eye   |  |
| Chronic effects   | Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.              |  |
| Signs and symptoms  | May cause eye irritation. Itching, redness, burning of skin.  |  |
| Potential environmental effects The product is not classified as environmentally hazardous. |   |  |

#### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Name   | CAS number     | %          |
|--|----------------|------------|
| Rigid expanded polyurethane modified polyisocyanurate foam | not applicable | 90 - 100   |
| Cyclopentane   | 287-92-3       | 2.5 - 10.0 |
| 2-Methylbutane   | 78-78-4        | 1 - 2.5    |

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#### 4. FIRST AID MEASURES

| First aid procedures  |   |
|-----------------------|---|
| Eye contact           | Dust in the eyes: Flush thoroughly with water for at least 15 minutes. Get medical attention if any discomfort continues. |
| Skin contact          | Contact with dust: Essentially nonirritating to skin. Wash with soap and water if mechanical injury occur.                |
| Inhalation            | If symptoms develop, move to fresh air. Get medical attention if discomfort develops or persists.                         |
| Ingestion             | Do not induce vomiting. Get medical attention immediately.  |
| 5. FIRE-FIGHTING MEAS | URES  |
|                       |   |
| Flammable properties  | Not flammable by OSHA criteria  |
| Extinguishing media   |   |

| Extinguishing media<br>Suitable extinguisl       | hing media<br>No specific measures are required as this product is a fire extinguishing<br>medium.  |
|--|---|
| Protection of firefighters<br>Specific hazards a | arising from the chemical<br>Not a fire hazard.   |
| Fire fighting instructions                       | Keep people away. Isolate fire and deny unnecessary entry. Soak<br>throughly with water to cool and prevent re-ignition. Cool surroundings<br>with water to localize fire zone. Hand held dry chemical or carbon dioxide<br>extinguisher may be used for small fires.                   |
| Fire fighting equipment                          | Wear positive-pressure self contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance. |
| Specific methods                                 | Not applicable.   |
| Hazardous combustion proc                        | ducts<br>Carbon monoxide. Nitrogen oxides.  |

#### 6. ACCIDENTAL RELEASE MEASURES

| Personal precautions      | No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the MSDS for additional personal protection advice when handling this product. |
|---------------------------|--|
| Environmental precautions | No specific precautions.   |
| Methods for cleaning up   | For waste disposal, see Section 13 of the MSDS.  |

### 7. HANDLING AND STORAGE

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| Handling  | Use work methods which minimize dust pr<br>ventilated areas. Wear appropriate personal<br>hands after handling. Observe good industria<br>"EXPOSURE CONTROLS AND PERSONAL<br>the MSDS. No smoking, open flames or source<br>storage area. Fabrication methods which inv<br>may release the blowing agent(s) remaining in<br>ventilation to assure localized concentration<br>maintained below the lower flammable lim<br>controlling of dusts are necessary for safe har | protective equipment. Wash<br>I hygiene practices. Refer to<br>PROTECTION", Section 8 of<br>ces of ignition in handling and<br>olve cutting into this product<br>n the cells. Provide adequate<br>ions in release areas are<br>it. Good housekeeping and |
|---|--|--|
| Storage   | Store away from incompatible materials. Minimize sources of ignition, such<br>as static build-up, heat, spark or flame. During shipment, storage,<br>installation and use, this material should not be exposed to flame or other<br>ignition sources. Read and follow manufacturer's recommendations.  |  |
| 8. EXPOSURE CONTROLS  | AND PERSONAL PROTECTION  |  |
| Occupational exposure limits<br>US. ACGIH Threshold Limit V | alues  |  |
| Components  | Туре   | Value  |
| 2-Methylbutane (78-78-4)                                    | TWA  | 600 ppm  |
| Cyclopentane (287-92-3)                                     | TWA  | 600 ppm  |
| Canada. Alberta OELs (Occu                                  | pational Health & Safety Code, Schedule 1, Tal   | ble 2)   |
| Components  | Туре   | Value  |
| 2-Methylbutane (78-78-4)                                    | TWA  | 600 ppm  |
|   |  | 1770 mg/m <sup>3</sup>   |
| Cyclopentane (287-92-3)                                     | TWA  | 600 ppm<br>1720 mg/m <sup>3</sup>  |
| Canada. British Columbia OE<br>Health and Safety Regulation | Ls. (Occupational Exposure Limits for Chemic   | al Substances, Occupational  |
| Components  | Type   | Value  |
|   | TWA  | 600 ppm  |
| 2-Methylbutane (78-78-4)<br>Cyclopentane (287-92-3)         | TWA  | 600 ppm  |
| Canada. Ontario OELs. (Minis                                | stry of Labor - Control of Exposure to Biological  | or Chemical Agents)  |
| Components  | Туре   | Value  |
| 2-Methylbutane (78-78-4)                                    | STEL   | 2210 mg/m <sup>3</sup>   |
| · · · · · ·   |  | 750 ppm  |
|   | TWA  | 600 ppm  |
|   |  | 1770 mg/m <sup>3</sup>   |
| $C_{\rm M}$ and $C_{\rm M}$                                 | TWA  | 600 ppm  |
| Cyclopentane (287-92-3)                                     | 1004   | 1720 mg/m <sup>3</sup>   |
|   |  | -  |
|   | stry of Labor - Regulation Respecting the Qual   |  |
| Components  | Туре   | Value  |
| Cyclopentane (287-92-3)                                     | TŴA  | 600 ppm  |
|   |  | 1720 mg/m <sup>3</sup>   |
| Engineering controls  | Provide sufficient ventilation for operation<br>Observe occupational exposure limits and mir   | s causing dust formation.  |
|   | Observe occupational exposure millis and mil   | innize the lisk of exposure.   |
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Personal protective equipment

Eye/face protection No special precautions. Skin protection Gloves, for handling rough edges Respiratory protection When engineering controls are not sufficient to lower exposure levels below the applicable exposure limit, use a NIOSH approved respirator for dusts. General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Routinely wash work clothing and protective equipment to remove contaminants. Observe any medical surveillance requirements. Ingestion No precautions necessary due to the physical properties of the material. **Engineering Controls Ventilation** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

| Appearance                | Rigid foam                    |
|---------------------------|-------------------------------|
| Physical state            | Solid                         |
| Odor                      | Odorless                      |
| Odor threshold            | Not available                 |
| Form                      | Foam                          |
| pН                        | Not available                 |
| Flash point               | Closed cup: > 300°C (> 572°F) |
| Auto-ignition temperature | > 400°C (> 752°F)             |
| Solubility in water       | Insoluble                     |

#### **10. STABILITY AND REACTIVITY**

| Chemical stability        | Thermally stable at typical use temperatures. See TDS.   |  |  |
|---------------------------|--|--|--|
| Conditions to avoid       | Avoid temperatures above 260°C (500°F). UV rays may cause discoloration.   |  |  |
| Incompatibility materials | Strong acids, strong alkalies and oxidizing agents   |  |  |
| Hazardous polymerization  | Will not occur   |  |  |
| Thermal decomposition     | Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition. |  |  |

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#### **11. TOXICOLOGICAL INFORMATION**

| Toxicological data       |   |  |
|--------------------------|---|--|
| Components               | Test results  |  |
| 2-Methylbutane (78-78-4) | Acute Inhalation LC50 Mouse: 450 mg/l 2 Hours   |  |
| Acute effects            | Under normal conditions of intended use, this material does not pose a risk to health.  |  |
| Local effects            | Exposure to particles from cutting operations may cause mechanical irritation of eyes.  |  |
| Repeated dose toxicity   | Repeated exposures to dusts of this material are not anticipated to result<br>in systemic toxicity or permanent lung injury; however, excessive<br>exposures may cause less severe respiratory effects. |  |

#### **12. ECOLOGICAL INFORMATION**

Ecotoxicity The product is not classified as environmentally hazardous. Not expected to be acutely toxic to aquatic organisms Persistence and degradability The product is not biodegradable. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected. Mobility in environmental media The product is insoluble in water. No bioconcentration is expected

because of the relatively high molecular weight (MW greater than 1000). In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material is expected to float.

#### **13. DISPOSAL CONSIDERATIONS**

**Disposal instructions:** Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

#### **14. TRANSPORT INFORMATION**

DOT, TDG, IMDG, IATA-ICAO: Not regulated.

#### **15. REGULATORY INFORMATION**

US federal regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

Cyclopentane: 100

2-Methylbutane: 100

Superfund Amendments and Reauthorization Act of 1986 (SARA)

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| Dela<br>Fire<br>Pres   | ediate Hazard No<br>ayed Hazard No<br>Hazard No<br>ssure Hazard No<br>ctivity Hazard No |                        |
|--|---|------------------------|
| Section 302 extremely hazardous  | s substance (40 CRF 355, Appendix A)  |                        |
| Νο   |   |                        |
| Section 311/312 (40 CFR 370)   |   |                        |
| Νο   |   |                        |
| Drug Enforcement Administration  | (DEA) (21 CFR 1308.11-15)   |                        |
| Not controlled   |   |                        |
| WHMIS status   |   |                        |
| Non controlled   |   |                        |
| Inventory status   |   |                        |
| Country(s) or region   | Inventory name  | On inventory (yes/no)* |
| Canada<br>Canada   | Domestic Substances List (DSL)<br>Non-Domestic Substances List (NDS                     | Yes<br>SL) No          |
| United States & Puerto Rico  | Toxic Substances Control Act (TSCA  | •                      |
|  | ts of this product comply with the inventor   | , <u>,</u>             |
| governing country(s)   |   |                        |
| State regulations  |   |                        |
| US - California Hazardo  | us Substances (Director's): Listed subs   | stance                 |
|  | ane (CAS 287-92-3) Listed.  |                        |
|  | K - Substance: Listed substance   |                        |
| -  | Itane (CAS 78-78-4) Listed.   |                        |
| Cyclopentane (CAS 287-92-3) Listed.  |   |                        |
| US - New Jersey Community RTK (EHS Survey): Reportable threshold                           |   |                        |
| 2-Methylbutane (CAS 78-78-4) 500 LBS   |   |                        |
| US - New Jersey RTK - Substances: Listed substance<br>2-Methylbutane (CAS 78-78-4) Listed. |   |                        |
| Cyclopentane (CAS 287-92-3) Listed.  |   |                        |
| US - Pennsylvania RTK - Hazardous Substances: Listed substance                             |   |                        |
| 2-Methylbutane (CAS 78-78-4) Listed.   |   |                        |
| Cyclopenta   | ne (CAS 287-92-3) Listed.   |                        |
|  |   |                        |

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California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986) This product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

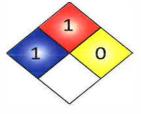
#### **16. OTHER INFORMATION**

Label requirements: None

Hazardous Material Information System



National Fire Protection Association



Notice to reader

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THE PRODUCT MAY PRESENT HAZARDS AND SHOULD BE USED WITH CAUTION. WHILE CERTAIN HAZARDS ARE DESCRIBED IN THIS PUBLICATION, NO GUARANTEE IS MADE THAT THESE ARE THE ONLY HAZARDS THAT EXIST.

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