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 1 W Longfellow Place 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 Skin 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 Suitable extinguisl	hing media No specific measures are required as this product is a fire extinguishing medium.
Protection of firefighters Specific hazards a	arising from the chemical Not a fire hazard.
Fire fighting instructions	Keep people away. Isolate fire and deny unnecessary entry. Soak throughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide 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 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 ventilated areas. Wear appropriate personal hands after handling. Observe good industria "EXPOSURE CONTROLS AND PERSONAL the MSDS. No smoking, open flames or source storage area. Fabrication methods which inv may release the blowing agent(s) remaining in ventilation to assure localized concentration maintained below the lower flammable lim controlling of dusts are necessary for safe har	protective equipment. Wash I hygiene practices. Refer to PROTECTION", Section 8 of ces of ignition in handling and olve cutting into this product n the cells. Provide adequate ions in release areas are it. Good housekeeping and
Storage	Store away from incompatible materials. Minimize sources of ignition, such as static build-up, heat, spark or flame. During shipment, storage, installation and use, this material should not be exposed to flame or other ignition sources. Read and follow manufacturer's recommendations.	
8. EXPOSURE CONTROLS	AND PERSONAL PROTECTION	
Occupational exposure limits 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 ³
Cyclopentane (287-92-3)	TWA	600 ppm 1720 mg/m ³
Canada. British Columbia OE Health and Safety Regulation	Ls. (Occupational Exposure Limits for Chemic	al Substances, Occupational
Components	Type	Value
	TWA	600 ppm
2-Methylbutane (78-78-4) 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 ³
· · · · · ·		750 ppm
	TWA	600 ppm
		1770 mg/m ³
$C_{\rm M}$ and $C_{\rm M}$	TWA	600 ppm
Cyclopentane (287-92-3)	1004	1720 mg/m ³
		-
	stry of Labor - Regulation Respecting the Qual	
Components	Туре	Value
Cyclopentane (287-92-3)	TŴA	600 ppm
		1720 mg/m ³
Engineering controls	Provide sufficient ventilation for operation 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 in systemic toxicity or permanent lung injury; however, excessive 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 Fire Pres	ediate Hazard No ayed Hazard No Hazard No ssure Hazard No 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 Canada	Domestic Substances List (DSL) Non-Domestic Substances List (NDS	Yes 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 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



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