

FLO – ROK CRACKFAST (MSDS)

CRACKFAST SEAL (PART A AND B)

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CRACKFAST RESIN (PART A AND B)

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Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: CRACKFAST SEAL – PART A
Product Number: CRACKFAST SEAL
Product Use: Chemical anchor.
Manufacturer/Supplier: UCAN Fastening Products
155 Champagne Drive, Unit 10
Toronto, Ontario M3J 2C6
www.ucanfast.com
Phone Number: 416-631-9400
24 hr. Emergency: CHEMTRAC 800-424-9300
Date of Preparation: February 28, 2012

Section 2: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**
WARNING

COMBUSTIBLE LIQUID. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting.

Inhalation: May cause respiratory tract irritation.

Chronic Effects: Prolonged or repeated contact may dry skin and cause irritation.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Medical Conditions Aggravated By Exposure: Because of its irritating properties, product may aggravate preexisting skin, eye, and respiratory conditions.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

FLO – ROK CRACKFAST**Part A (Seal)**

Date of Prep: 02/28/2012

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Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
2,5-Furandione, polymer with 2,2'-oxybis[ethanol] and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene	64386-67-0	10 - 30
Benzene, 1-ethenyl-4-methyl-	622-97-9	5 - 10
Benzene, 1-ethenyl-3-methyl-	100-80-1	5 - 10
Titanium dioxide	13463-67-7	0.1 - 1
Silica, amorphous, fumed	7631-86-9 / 112945-52-5	1 - 5

Note: Exposure to Silica, Quartz is applicable only if cured with UCAN Universal Catalyst and sanded.

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of soap and water. Call a physician if irritation develops or persists.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention or call poison control.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Combustible by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

FLO – ROK CRACKFAST**Part A (Seal)**

Date of Prep: 02/28/2012

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Section 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.
- Environmental Precautions:** Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
- Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for Clean-Up:** Scoop up material and place in a disposal container. Provide ventilation.
- Other Information:** Not available.

Section 7: HANDLING AND STORAGE**Handling:**

Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Do not store at temperatures above 30 °C / 86 °F.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines**

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
2,5-Furandione, polymer with 2,2'-oxybis[ethanol] and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene	Not available.	Not available.
Benzene, 1-ethenyl-4-methyl-	Not available.	Not available.
Benzene, 1-ethenyl-3-methyl-	Not available.	Not available.
Titanium dioxide	10 mg/m ³	10 mg/m ³
Silica, amorphous, fumed	80 mg/m ³ /%SiO ₂ .	10 mg/m ³

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

- Eye/Face Protection:** Wear eye/face protection.
- Hand Protection:** Wear suitable gloves.
- Skin and Body Protection:** Wear suitable protective clothing.
- Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

FLO – ROK CRACKFAST**Part A (Seal)**

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Paste-like compound.
Color:	Off-white.
Odour:	Aromatic.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Viscous.
Freezing Point:	Not available.
Boiling Point:	> 165 °C (> 329 °F)
Flash Point:	~ 53 °C (~ 127.4 °F)
Evaporation Rate:	Not available.
Lower Flammability Limit:	1.1 %
Upper Flammability Limit:	5.2 %
Vapor Pressure:	670 Pa @ 20 °C
Vapor Density:	Not available.
Specific Gravity:	Not available.
Solubility in Water:	Insoluble.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	-

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Oxidizers.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION**EFFECTS OF ACUTE EXPOSURE****Component Analysis**

Ingredient	LD₅₀ (oral)	LC₅₀
2,5-Furandione, polymer with 2,2'-oxybis[ethanol] and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene	2650 mg/kg, rat	Not available.
Benzene, 1-ethenyl-4-methyl-	2255 mg/kg, rat	Not available.
Benzene, 1-ethenyl-3-methyl-	Not available.	Not available.
Titanium dioxide	>10000 mg/kg, rat	Not available.
Silica, amorphous, fumed	5000 mg/kg, rat	>2.2 mg/L 1hr, rat

FLO – ROK CRACKFAST**Part A (Seal)**

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- Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Skin:** May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Ingestion:** Harmful if swallowed. May cause stomach distress, nausea or vomiting.
- Inhalation:** May cause respiratory tract irritation.

EFFECTS OF CHRONIC EXPOSURE**Target Organs:** Not available.**Chronic Effects:** Not hazardous by WHMIS/OSHA criteria.**Carcinogenicity:** Hazardous by WHMIS/OSHA criteria.**Ingredient****Chemical Listed as Carcinogen
or Potential Carcinogen ***

2,5-Furandione, polymer with 2,2'-oxybis[ethanol] and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene	Not listed.
Benzene, 1-ethenyl-4-methyl-	I-3
Benzene, 1-ethenyl-3-methyl-	I-3
Titanium dioxide	G-A4, I-2B
Silica, amorphous, fumed	I-3

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.**Reproductive Effects:** Not hazardous by WHMIS/OSHA criteria.**Developmental Effects:****Teratogenicity:** Not hazardous by WHMIS/OSHA criteria.**Embryotoxicity:** Not hazardous by WHMIS/OSHA criteria.**Respiratory Sensitization:** Not hazardous by WHMIS/OSHA criteria.**Skin Sensitization:** Not hazardous by WHMIS/OSHA criteria.**Toxicologically Synergistic Materials:** Not available.**Section 12: ECOLOGICAL INFORMATION****Ecotoxicity:** May cause long-term adverse effects in the aquatic environment.**Persistence / Degradability:** Not available.**Bioaccumulation / Accumulation:** Not available.**Mobility in Environment:** Not available.

FLO – ROK CRACKFAST

Part A (Seal)

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Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

UN1866; Resin solution, flammable; Class 3; PG III
ORM-D (<60 L)

TDG Classification

UN1866; Resin solution, flammable; Class 3; PG III
Limited Quantity (<60 L)

Section 15: REGULATORY INFORMATION

Federal Regulations

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
2,5-Furandione, polymer with 2,2'-oxybis[ethanol] and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene	Not listed.	Not listed.	Not listed.	Not listed.
Benzene, 1-ethenyl-4-methyl-	Not listed.	Not listed.	Not listed.	Not listed.
Benzene, 1-ethenyl-3-methyl-	Not listed.	Not listed.	Not listed.	Not listed.
Titanium dioxide	Not listed.	Not listed.	Not listed.	Not listed.
Silica, amorphous, fumed	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations

California Proposition 65:

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
2,5-Furandione, polymer with 2,2'-oxybis[ethanol] and 3a,4,7,7a-tetrahydro-4,7-methano-1H-indene	DSL	Yes.
Benzene, 1-ethenyl-4-methyl-	NDSL	Yes.
Benzene, 1-ethenyl-3-methyl-	NDSL	Yes.
Titanium dioxide	DSL	Yes.
Silica, amorphous, fumed	DSL	Yes.

FLO – ROK CRACKFAST**Part A (Seal)**

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HMIS - Hazardous Materials Identification System

Health - 1* Flammability - 2 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 1 Fire - 2 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme**WHMIS Classification(s):**Class B3 - Combustible Liquid
Class D2A - Carcinogenicity
Class D2B - Skin/Eye Irritant**WHMIS Hazard Symbols:****SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:****OSHA (O)** Occupational Safety and Health Administration.**ACGIH (G)** American Conference of Governmental Industrial Hygienists.
A1 - Confirmed human carcinogen.
A2 - Suspected human carcinogen.
A3 - Animal carcinogen.
A4 - Not classifiable as a human carcinogen.
A5 - Not suspected as a human carcinogen.**IARC (I)** International Agency for Research on Cancer.
1 - The agent (mixture) is carcinogenic to humans.
2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.**NTP (N)** National Toxicology Program.
1 - Known to be carcinogens.
2 - Reasonably anticipated to be carcinogens.**Section 16: OTHER INFORMATION****Disclaimer:**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: CRACKFAST SEAL – PART B
Product Number: CRACKFAST SEAL
Product Use: Chemical anchor.
Manufacturer/Supplier: UCAN Fastening Products
155 Champagne Drive, Unit 10
Toronto, Ontario M3J 2C6
www.ucanfast.com
Phone Number: 416-631-9400
24 hr. Emergency: CHEMTRAC 800-424-9300
Date of Preparation: February 28, 2012

Section 2: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

DANGER

MAY CAUSE EYE IRRITATION. MAY CAUSE SKIN IRRITATION.

Potential Health Effects: See Section 11 for more information.**Likely Routes of Exposure:** Skin contact, eye contact, inhalation, and ingestion.**Eye:** May cause eye irritation.**Skin:** May cause skin irritation. May cause sensitisation by skin contact.**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.**Inhalation:** May cause respiratory tract irritation.**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation.**Signs and Symptoms:** Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, defatting and cracking of the skin.**Medical Conditions Aggravated By Exposure:** Because of its irritating properties, product may aggravate preexisting skin, eye, and respiratory conditions.**Target Organs:** Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

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Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**Ingredient**

	CAS #	Wt. %
Benzoyl peroxide	94-36-0	10-30
Fuller's Earth	8031-18-3	5-10
Benzoic acid, 2-ethylhexyl ester	5444-75-7	5-10
Zinc stearate	557-05-1	1-5

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Not flammable by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

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Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

Methods for Containment: Contain and/or absorb spill with inert material, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Scoop up material and place in a disposal container. Provide ventilation.

Other Information: Not available.

Section 7: HANDLING AND STORAGE**Handling:**

Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Handle and open container with care. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed. Do not store at temperatures above 30 °C / 86 °F.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines**

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Benzoyl peroxide	5 mg/m ³	5 mg/m ³
Fuller's Earth	Not available.	Not available.
Benzoic acid, 2-ethylhexyl ester	Not available.	Not available.
Zinc stearate	15 mg/m ³	Not available.

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear approved eye protection (properly fitted dust- or splashproof chemical safety goggles) and face protection (face shield).

Hand Protection: Butyl gloves. Viton gloves. Nitril gloves. Neoprene gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

FLO – ROK CRACKFAST**Part B (Seal)**

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Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Paste-like compound.
Color:	Black.
Odour:	Perceptible odor.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	Not available.
Solubility in Water:	Not Miscible.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	-

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Strong acids. Bases. Alkalis. Heavy metals.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION**EFFECTS OF ACUTE EXPOSURE****Component Analysis**

Ingredient	LD₅₀ (oral)	LC₅₀
Benzoyl peroxide	6400 mg/kg, rat	Not available.
Fuller's Earth	Not available.	Not available.
Benzoic acid, 2-ethylhexyl ester	Not available.	Not available.
Zinc stearate	> 5000 mg/kg, rat	Not available.

FLO – ROK CRACKFAST**Part B (Seal)**

Date of Prep: 02/28/2012

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- Eye:** May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
- Skin:** May cause skin irritation. May cause sensitisation by skin contact. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
- Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
- Inhalation:** May cause respiratory tract irritation.

EFFECTS OF CHRONIC EXPOSURE**Target Organs:** Not available.**Chronic Effects:** Not hazardous by WHMIS/OSHA criteria.**Carcinogenicity:** Not hazardous by WHMIS/OSHA criteria.

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen *
Benzoyl peroxide	G-A4, 1-3
Fuller's Earth	Not listed.
Benzoic acid, 2-ethylhexyl ester	Not listed.
Zinc stearate	Not listed.

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.**Reproductive Effects:** Not hazardous by WHMIS/OSHA criteria.**Developmental Effects:****Teratogenicity:** Not hazardous by WHMIS/OSHA criteria.**Embryotoxicity:** Not hazardous by WHMIS/OSHA criteria.**Respiratory Sensitization:** Not hazardous by WHMIS/OSHA criteria.**Skin Sensitization:** Hazardous by WHMIS/OSHA criteria.**Toxicologically Synergistic Materials:** Not available.**Section 12: ECOLOGICAL INFORMATION****Ecotoxicity:** May cause long-term adverse effects in the aquatic environment.**Persistence / Degradability:** Not available.**Bioaccumulation / Accumulation:** Not available.**Mobility in Environment:** Not available.**Section 13: DISPOSAL CONSIDERATIONS****Disposal Instructions:**

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

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Section 14: TRANSPORTATION INFORMATION**DOT Classification**UN3108; Organic peroxide Type E, Solid; Class 5.2; PG II
ORM-D (< 10kg)**TDG Classification**UN3108; Organic peroxide Type E, Solid; Class 5.2; PG II
Limited Quantity (< 10kg)**Section 15: REGULATORY INFORMATION****Federal Regulations****Canadian:** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.**US:** MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).**SARA Title III
Ingredient**

	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Benzoyl peroxide	Not listed.	Not listed.	Not listed.	313
Fuller's Earth	Not listed.	Not listed.	Not listed.	Not listed.
Benzoic acid, 2-ethylhexyl ester	Not listed.	Not listed.	Not listed.	Not listed.
Zinc stearate	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations**California Proposition 65:**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
Benzoyl peroxide	DSL	Yes.
Fuller's Earth	DSL	Yes.
Benzoic acid, 2-ethylhexyl ester	DSL	Yes.
Zinc stearate	DSL	Yes.

HMIS - Hazardous Materials Identification System**Health - 2* Flammability - 1 Physical Hazard - 0 PPE – B****NFPA - National Fire Protection Association:****Health - 2 Fire - 1 Reactivity - 0****Hazard Rating:** 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

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WHMIS Classification(s):

Class C - Oxidizing Material

Class D2B - Skin Sensitization

Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:**SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:****OSHA (O)** Occupational Safety and Health Administration.**ACGIH (G)** American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION**Disclaimer:**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: CRACKFAST INJECTION RESIN – PART A
Product Number: CRACKFAST RESIN
Product Use: Epoxy injection resin.
Manufacturer/Supplier: UCAN Fastening Products
155 Champagne Drive, Unit 10
Toronto, Ontario M3J 2C6
www.ucanfast.com
Phone Number: 416-631-9400
24 hr. Emergency: CHEMTRAC 800-424-9300
Date of Preparation: February 28, 2012

Section 2: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW****WARNING**

IRRITATING TO EYES. IRRITATING TO SKIN.

Potential Health Effects: See Section 11 for more information.**Likely Routes of Exposure:** Skin contact, eye contact, inhalation, and ingestion.**Eye:** Irritating to eyes.**Skin:** Irritating to skin. May cause sensitization by skin contact.**Ingestion:** May be harmful if swallowed. May cause stomach distress, nausea or vomiting.**Inhalation:** May cause respiratory tract irritation.**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation.**Signs and Symptoms:** Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. Symptoms may include redness, edema, drying, defatting and cracking of the skin. May cause burning of mouth, throat, and esophagus.**Medical Conditions Aggravated By Exposure:** Because of its irritating properties, product may aggravate preexisting skin, eye, and respiratory conditions.**Target Organs:** Skin, eyes, gastrointestinal tract, respiratory system.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential Environmental Effects: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

FLO – ROK CRACKFAST**Part A (Resin)**

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Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**Ingredient**

	CAS #	Wt. %
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	25068-38-6	40 - 70
Phenol, polymer with formaldehyde, glycidyl ether	28064-14-4	10 - 30
1,6-bis(2,3-epoxypropoxy)hexane	16096-31-4	10 - 30

Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
- Skin Contact:** In case of contact, immediately flush skin with plenty of soap and water. Get medical attention immediately.
- Inhalation:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention or call poison control.
- General Advice:** In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

- Flammability:** Not flammable by WHMIS/OSHA criteria.
- Means of Extinction:**
- Suitable Extinguishing Media:** Powder, water spray, foam, carbon dioxide.
- Unsuitable Extinguishing Media:** Not available.
- Products of Combustion:** May include, and are not limited to: oxides of carbon.
- Explosion Data:**
- Sensitivity to Mechanical Impact:** Not available.
- Sensitivity to Static Discharge:** Not available.
- Protection of Firefighters:** Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

FLO – ROK CRACKFAST**Part A (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 6: ACCIDENTAL RELEASE MEASURES

- Personal Precautions:** Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
- Environmental Precautions:** Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
- Methods for Containment:** Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
- Methods for Clean-Up:** Scoop up material and place in a disposal container. Provide ventilation.
- Other Information:** Not available.

Section 7: HANDLING AND STORAGE**Handling:**

Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Do not store at temperatures above 35 °C / 95 °F.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines**

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Not available.	Not available.
Phenol, polymer with formaldehyde, glycidyl ether	Not available.	Not available.
1,6-bis(2,3-epoxypropoxy)hexane	Not available.	Not available.

- Engineering Controls:** Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

- Eye/Face Protection:** Wear eye/face protection.
- Hand Protection:** Wear suitable gloves.
- Skin and Body Protection:** Wear suitable protective clothing.
- Respiratory Protection:** In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

FLO – ROK CRACKFAST**Part A (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Not available.
Color:	Yellow.
Odour:	Slight odour.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	> 200 °C (> 392 °F)
Flash Point:	> 100 °C (> 212 °F)
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	1.20
Solubility in Water:	Insoluble.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, g/L:	-

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Acids. Bases. Amines. Alcohols. Acid anhydrides.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION**EFFECTS OF ACUTE EXPOSURE****Component Analysis**

Ingredient	LD₅₀ (oral)	LC₅₀
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)] bisoxirane	11400 mg/kg , rat	Not available.
Phenol, polymer with formaldehyde, glycidyl ether	Not available.	Not available.
1,6-bis(2,3-epoxypropoxy)hexane	Not available.	Not available.

Eye: Irritating to eyes. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: Irritating to skin. May cause sensitization by skin contact. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

FLO – ROK CRACKFAST**Part A (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.
May cause burning of mouth, throat, and esophagus.

Inhalation: May cause respiratory tract irritation.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS/OSHA criteria.

Carcinogenicity: Not hazardous by WHMIS/OSHA criteria.

Ingredient**Chemical Listed as
Carcinogen or Potential
Carcinogen ***

2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane
1,4-Butanediol diglycidyl ether
Phenol, polymer with formaldehyde, glycidyl ether

Not listed.
Not listed.
Not listed.

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.

Reproductive Effects: Not hazardous by WHMIS/OSHA criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS/OSHA criteria.

Embryotoxicity: Not hazardous by WHMIS/OSHA criteria.

Respiratory Sensitization: Not hazardous by WHMIS/OSHA criteria.

Skin Sensitization: Hazardous by WHMIS/OSHA criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Heavier than water.

Section 13: DISPOSAL CONSIDERATIONS**Disposal Instructions:**

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.
Do not empty into drains.

FLO – ROK CRACKFAST

Part A (Resin)

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 14: TRANSPORTATION INFORMATION

DOT Classification

UN3082; Environmentally hazardous substance, liquid, n.o.s. (epoxy resin); Class 9; PG III
ORM-D (≤ 5L)

TDG Classification

UN3082; Environmentally hazardous substance, liquid, n.o.s. (epoxy resin); Class 9; PG III
Limited Quantity (≤ 5L)

Section 15: REGULATORY INFORMATION

Federal Regulations

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	Not listed.	Not listed.	Not listed.	Not listed.
Phenol, polymer with formaldehyde, glycidyl ether	Not listed.	Not listed.	Not listed.	Not listed.
1,6-bis(2,3-epoxypropoxy)hexane	Not listed.	Not listed.	Not listed.	Not listed.

State Regulations

California Proposition 65:

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
2,2'-[(1-methylethylidene)bis(4,1-phenyleneoxymethylene)]bisoxirane	DSL	Yes.
Phenol, polymer with formaldehyde, glycidyl ether	DSL	Yes.
1,6-bis(2,3-epoxypropoxy)hexane	DSL	Yes.

HMIS - Hazardous Materials Identification System

Health - 1* Flammability - 0 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 1 Fire - 0 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

WHMIS Classification(s):

Class D2B - Skin Sensitization

Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:**SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:****OSHA (O)** Occupational Safety and Health Administration.**ACGIH (G)** American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION**Disclaimer:**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: CRACKFAST INJECTION RESIN – PART B
Product Number: CRACKFAST RESIN
Product Use: Epoxy injection resin.
Manufacturer/Supplier: UCAN Fastening Products
155 Champagne Drive, Unit 10
Toronto, Ontario M3J 2C6
www.ucanfast.com
Phone Number: 416-631-9400
24 hr. Emergency: CHEMTRAC 800-424-9300
Date of Preparation: February 28, 2012

Section 2: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

DANGER

CORROSIVE MATERIAL - CAUSES SEVERE BURNS. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

Potential Health Effects: See Section 11 for more information.**Likely Routes of Exposure:** Skin contact, skin absorption, eye contact, inhalation, and ingestion.

Eye: Irritating to eyes. May cause burns. Risk of serious damage to eyes.
Skin: Irritating to skin. May cause burns. May cause sensitization by skin contact.
Ingestion: May cause burns. May be harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful: may cause lung damage if swallowed.
Inhalation: May cause respiratory tract irritation. May cause sensitization by inhalation.

Chronic Effects: Non-controlled, repeated or prolonged exposure may cause the possibility of target organ damage.**Signs and Symptoms:** May cause serious chemical burns. Severe irritation, redness and pain. Blisters. Serious skin burns. Abdominal pain. May cause burning of mouth, throat, and esophagus. May cause respiratory tract irritation and a feeling of tightness in the chest.**Medical Conditions Aggravated By Exposure:** Because of its irritating properties, product may aggravate preexisting skin, eye, and respiratory conditions.**Target Organs:** Skin, eyes, gastrointestinal tract, respiratory system.
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.**Potential Environmental Effects:** Harmful to aquatic organisms. See Section 12 for more information.

FLO – ROK CRACKFAST**Part B (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS**Ingredient**

	CAS #	Wt. %
Hydrocarbons, C9-unsatd., polymers with phenol	71302-91-5	30 - 60
N-(2-aminoethyl)piperazine	140-31-8	10 - 30
Phenol, styrenated	61788-44-1	5 - 10
1,3-Cyclohexanedimethanamine	2579-20-6	3 - 7
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	3 - 7
Benzyl alcohol	100-51-6	3 - 7
Salicylic acid	69-72-7	1 - 5
Ethylenediamine	107-15-3	0.1 - 1
Cyclohexanone	108-94-1	0.1 - 1

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses, if worn. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention or call poison control.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Not flammable by WHMIS/OSHA criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Not available.

Products of Combustion: May include, and are not limited to: oxides of carbon, oxides of nitrogen.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

FLO – ROK CRACKFAST**Part B (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.
Environmental Precautions:	Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.
Methods for Containment:	Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).
Methods for Clean-Up:	Scoop up material and place in a disposal container. Provide ventilation.
Other Information:	Not available.

Section 7: HANDLING AND STORAGE**Handling:**

Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Launder contaminated clothing before reuse. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Do not store at temperatures above 35 °C / 95 °F.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**Exposure Guidelines**

Ingredient	Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Hydrocarbons, C9-unsatd., polymers with phenol	Not available.	Not available.
N-(2-aminoethyl)piperazine	Not available.	Not available.
Phenol, styrenated	Not available.	Not available.
1,3-Cyclohexanedimethanamine	Not available.	Not available.
2,4,6-tris(dimethylaminomethyl)phenol	Not available.	Not available.
Benzyl alcohol	Not available.	Not available.
Salicylic acid	Not available.	Not available.
Ethylenediamine	10 ppm	Not available.
Cyclohexanone	25 ppm	20 ppm

FLO – ROK CRACKFAST**Part B (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing, including appropriate boots, boot covers, overshoes, etc., as may be appropriate.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Not available.
Color:	Yellow.
Odour:	Characteristic.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	Not available.
Flash Point:	> 100 °C (> 212 °F)
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.
Vapor Pressure:	Not available.
Vapor Density:	Not available.
Specific Gravity:	Not available.
Solubility in Water:	Not available.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not available.
Percent Volatile, wt. %:	Not available.
VOC content, g/L:	-

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Acids. Copper. Alcohols. Acid anhydrides.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon, oxides of nitrogen.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

FLO – ROK CRACKFAST**Part B (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Section 11: TOXICOLOGY INFORMATION**EFFECTS OF ACUTE EXPOSURE****Component Analysis**

Ingredient	LD₅₀ (oral)	LC₅₀
Hydrocarbons, C9-unsatd., polymers with phenol	Not available.	Not available.
N-(2-aminoethyl)piperazine	2140 mg/kg, rat	Not available.
Phenol, styrenated	2500 mg/kg, rat	Not available.
1,3-Cyclohexanedimethanamine	880 mg/kg, rat	Not available.
2,4,6-tris(dimethylaminomethyl)phenol	1000 mg/kg, rat	Not available.
Benzyl alcohol	1230 mg/kg, rat	8.8 mg/L 4hr, rat
Salicylic acid	891 mg/kg, rat	> 0.9mg/L 1hr, rat
Ethylenediamine	637 mg/kg, rat	Not available.
Cyclohexanone	800 mg/kg, rat	8000 ppm 4hr, rat; 10.7 mg/L 4hr, rat

Eye: Irritating to eyes. May cause serious chemical burns. Severe irritation, redness and pain. Risk of serious damage to eyes.

Skin: Irritating to skin. May cause burns. May cause sensitization by skin contact. Redness. Pain. Blisters. Serious skin burns.

Ingestion: May cause burns. May be harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful: may cause lung damage if swallowed. May cause burning of mouth, throat, and esophagus.

Inhalation: May cause respiratory tract irritation and a feeling of tightness in the chest. May cause sensitization by inhalation.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS/OSHA criteria.

Carcinogenicity: Not hazardous by WHMIS/OSHA criteria.

Ingredient**Chemical Listed as
Carcinogen or Potential**

Hydrocarbons, C9-unsatd., polymers with phenol
N-(2-aminoethyl)piperazine
Phenol, styrenated
1,3-Cyclohexanedimethanamine
2,4,6-tris(dimethylaminomethyl)phenol
Benzyl alcohol
Salicylic acid
Ethylenediamine
Cyclohexanone

Carcinogen *
Not listed.
Not listed.
Not listed.
Not listed.
Not listed.
Not listed.
Not listed.
G-A4
G-A3, I-3

* See Section 15 for more information.

FLO – ROK CRACKFAST**Part B (Resin)**

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

Mutagenicity: Not hazardous by WHMIS/OSHA criteria.**Reproductive Effects:** Hazardous by WHMIS/OSHA criteria.**Developmental Effects:****Teratogenicity:** Not hazardous by WHMIS/OSHA criteria.**Embryotoxicity:** Not hazardous by WHMIS/OSHA criteria.**Respiratory Sensitization:** Hazardous by WHMIS/OSHA criteria.**Skin Sensitization:** Hazardous by WHMIS/OSHA criteria.**Toxicologically Synergistic Materials:** Not available.**Section 12: ECOLOGICAL INFORMATION****Ecotoxicity:** Harmful to aquatic organisms.**Persistence / Degradability:** Not available.**Bioaccumulation / Accumulation:** Not available.**Mobility in Environment:** Heavier than water.**Section 13: DISPOSAL CONSIDERATIONS****Disposal Instructions:**

This material must be disposed of in accordance with all local, state, provincial, and federal regulations. Do not empty into drains.

Section 14: TRANSPORTATION INFORMATION**DOT Classification**

UN2735; Amines, liquid, corrosive, n.o.s. (N-(2-aminoethyl)piperazine and 1,3-cyclohexylenbis (methylamine)); Class 8; PG III
ORM-D (_ 5L)

TDG Classification

UN2735; Amines, liquid, corrosive, n.o.s. (N-(2-aminoethyl)piperazine and 1,3-cyclohexylenbis (methylamine)); Class 8; PG III
Limited Quantity (_ 5L)

Section 15: REGULATORY INFORMATION**Federal Regulations**

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

FLO – ROK CRACKFAST

Part B (Resin)

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Hydrocarbons, C9-unsatd., polymers with phenol	Not listed.	Not listed.	Not listed.	Not listed.
N-(2-aminoethyl)piperazine	Not listed.	Not listed.	Not listed.	Not listed.
Phenol, styrenated	Not listed.	Not listed.	Not listed.	Not listed.
1,3-Cyclohexanedimethanamine	Not listed.	Not listed.	Not listed.	Not listed.
2,4,6-tris(dimethylaminomethyl)phenol	Not listed.	Not listed.	Not listed.	Not listed.
Benzyl alcohol	Not listed.	Not listed.	Not listed.	Not listed.
Salicylic acid	Not listed.	Not listed.	Not listed.	Not listed.
Ethylenediamine	10,000	5,000	5,000	Not listed.
Cyclohexanone	Not listed.	Not listed.	5,000	Not listed.

State Regulations

California Proposition 65:

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
Hydrocarbons, C9-unsatd., polymers with phenol	NDSL	Yes.
N-(2-aminoethyl)piperazine	DSL	Yes.
Phenol, styrenated	DSL	Yes.
1,3-Cyclohexanedimethanamine	DSL	Yes.
2,4,6-tris(dimethylaminomethyl)phenol	DSL	Yes.
Benzyl alcohol	DSL	Yes.
Salicylic acid	DSL	Yes.
Ethylenediamine	DSL	Yes.
Cyclohexanone	DSL	Yes.

HMIS - Hazardous Materials Identification System

Health - 3* Flammability - 0 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 3 Fire - 0 Reactivity – 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

- Class D2A - Reproductive Toxicity
- Class D2A - Respiratory Sensitization
- Class D2B - Skin Sensitization
- Class E - Corrosive Material

Date of Prep: 02/28/2012

Revision: 1

Rev. Date: 03/23/2016

WHMIS Hazard Symbols:**SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:****OSHA (O)** Occupational Safety and Health Administration.**ACGIH (G)** American Conference of Governmental Industrial Hygienists.

A1 - Confirmed human carcinogen.

A2 - Suspected human carcinogen.

A3 - Animal carcinogen.

A4 - Not classifiable as a human carcinogen.

A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

1 - The agent (mixture) is carcinogenic to humans.

2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.

2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.

3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.

4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

1 - Known to be carcinogens.

2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION**Disclaimer:**

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.