

**Section 1: IDENTIFICATION**

**Product Name:** Decanted Oil (Lima)

**Synonyms:** FCC Decanted Oil; Decanted Oil; Clarified Oil; Aromatic Petroleum Oil; FCC Slurry; Cat Slurry Oil; Decant Oil; Decanted Oil to Exchangers and Filter; Decanted Oil from Filter to Storage; CAS No. 64741-62-4.

**Product Use:** Cat cracked clarified oil process intermediate sent through filtration and then to storage.

**Restrictions on Use:** Not available.

**Manufacturer/Supplier:** Husky Lima Refinery  
1150 South Metcalf Street  
Lima, OH 45804

**Phone Number:** 403-298-6111

**Emergency Phone:** Chemtrec: 1-800-424-9300  
Husky Emergency Response Center: 877-262-2111

**Date of Preparation of SDS:** May 14, 2021

**Section 2: HAZARD(S) IDENTIFICATION****GHS INFORMATION**

**Classification:** Flammable Liquids, Category 4  
Eye Irritation, Category 2A  
Carcinogenicity, Category 1B  
Aspiration Hazard, Category 1

**LABEL ELEMENTS****Hazard****Pictogram(s):****Signal Word:** Danger

**Hazard Statements:** Combustible liquid.  
Causes serious eye irritation.  
May cause cancer.  
May be fatal if swallowed and enters airways.

**Precautionary Statements**

**Prevention:** Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
Wash hands thoroughly after handling.  
Wear protective gloves, protective clothing, eye and face protection.

**Response:** IF SWALLOWED: Immediately call a poison center or doctor.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 IF exposed or concerned: Get medical attention.  
 Do NOT induce vomiting.  
 If eye irritation persists: Get medical attention.  
 In case of fire: Use dry chemical, CO<sub>2</sub>, water spray or regular foam to extinguish.

**Storage:** Store in a well-ventilated place. Keep cool.  
 Store locked up.

**Disposal:** Dispose of contents and container in accordance with applicable regional, national and local laws and regulations.

**Hazards Not Otherwise Classified:** Not applicable.

**Ingredients with Unknown Toxicity:** None.

This material is considered hazardous by the OSHA Hazard Communication Standard, (29 CFR 1910.1200).

This material is considered hazardous by the Hazardous Products Regulations.

### Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredient(s)	Common name / Synonyms	CAS No.	% wt./wt.
Syntower bottoms	Not available.	64741-62-4	100
Polycyclic Aromatic Hydrocarbons	Not available.	130498-29-2	< 5
Hydrogen sulfide (H <sub>2</sub> S)	Hydrogen sulphide	7783-06-4	variable
Pyrene	Not available.	129-00-0	variable

### Section 4: FIRST-AID MEASURES

**Inhalation:** If inhaled: Call a poison center or doctor if you feel unwell.

**Acute and delayed symptoms and effects:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. This product contains small amounts of Hydrogen sulphide which may accumulate in confined spaces. Inhalation of Hydrogen sulphide may cause loss of sense of smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness, and fluid buildup in the lungs (pulmonary edema), which can be fatal. At 300 ppm unconsciousness may occur after 20 minutes. From 300 to 500 ppm, death can occur within minutes of continuous exposure. Above 500 ppm Hydrogen sulphide may cause instantaneous loss of consciousness and immediate death.

**Eye Contact:** If in eyes: Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

**Acute and delayed symptoms and effects:** Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hot liquid product may cause serious thermal burns on direct contact.

**Skin Contact:** If on skin (or hair): Rinse skin with water or shower. Get immediate medical attention. Remove non-adhering contaminated clothing. Do not remove adherent material or clothing.

**Acute and delayed symptoms and effects:** May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Exposure to Syntower bottoms may cause a phototoxicity reaction: liquid or mist on the skin may produce a painful sunburn reaction when exposed to sunlight.

**Ingestion:** If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.

**Acute and delayed symptoms and effects:** May be fatal if swallowed and enters airways. Hot product may cause thermal burns. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

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

**Note to Physicians:** Symptoms may not appear immediately. For inhalation of Hydrogen Sulphide, consider oxygen.

## Section 5: FIRE-FIGHTING MEASURES

### FLAMMABILITY AND EXPLOSION INFORMATION

Combustible liquid. Will be easily ignited by heat, sparks or flames. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Most vapors are heavier than air. They will spread along ground and collect in low or confined areas (sewers, basements, tanks). Vapor explosion hazard indoors, outdoors or in sewers. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Many liquids are lighter than water. Substance may be transported hot. When heated, this material may evolve toxic and flammable Hydrogen sulphide.

If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions.

Fire involving Tanks or Car/Trailer Loads: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. ALWAYS stay away from tanks engulfed in fire. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn.

**Sensitivity to Mechanical Impact:** This material is not sensitive to mechanical impact.  
**Sensitivity to Static Discharge:** This material is sensitive to static discharge.

**MEANS OF EXTINCTION**

**Suitable Extinguishing Media:** Small Fire: Dry chemical, CO<sub>2</sub>, water spray or regular foam.

Large Fire: Water spray, fog or regular foam. Move containers from fire area if you can do it without risk.

**Unsuitable Extinguishing Media:** Do not spray water onto burning product as this may cause spattering and spreading of the flame.

**Products of Combustion:** Oxides of carbon. Oxides of sulphur.

**Protection of Firefighters:** Inhalation or contact with material may irritate or burn skin and eyes. Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation. Runoff from fire control or dilution water may cause pollution. Hydrogen sulphide is heavier than air and may collect in low lying areas and confined spaces. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

**Section 6: ACCIDENTAL RELEASE MEASURES**

**Emergency Procedures:** As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded.

**Personal Precautions:** Do not touch or walk through spilled material. Use personal protection recommended in Section 8. Don full-face, positive pressure, self-contained breathing apparatus.

**Environmental Precautions:** Prevent entry into waterways, sewers, basements or confined areas.

**Methods for Containment:** Stop leak if you can do it without risk. A vapor suppressing foam may be used to reduce vapors.

**Methods for Clean-Up:** Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Use clean non-sparking tools to collect absorbed material.

**Other Information:** See Section 13 for disposal considerations.

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

Do not swallow. Avoid breathing mist, vapours, or spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use non-sparking tools.

Take action to prevent static discharges. Wash hands thoroughly after handling. Grounding of containers/pouring equipment is necessary when transferring hot liquid product. See Section 8 for information on Personal Protective Equipment.

**Storage:**

Store in a well-ventilated place. Keep cool. Store locked up. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of the reach of children. Head spaces in storage containers may contain toxic hydrogen sulphide gas. Structural materials and lighting and ventilation systems should be corrosion resistant.

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

Syntower bottoms [CAS No. 64741-62-4]

**ACGIH:** A2; Exposure by all routes should be carefully controlled to levels as low as possible (2009); For Mineral oil, excluding metal working fluids; Poorly and mildly refined

**OSHA:** 5 mg/m<sup>3</sup> (TWA); For Oil mist, mineral.

Polycyclic Aromatic Hydrocarbons [CAS No. 130498-29-2]

**ACGIH:** A2; BEI; Exposure by all routes should be carefully controlled to levels as low as possible (1990); For Benz[a]anthracene

**OSHA:** 0.2 mg/m<sup>3</sup> (TWA); For benzene-soluble fraction.

Hydrogen sulphide [CAS No. 7783-06-4]

**ACGIH:** 1 ppm (TWA); 5 ppm (STEL); (2009);

**OSHA:** 20 ppm (C); 50 ppm (Peak) (Maximum duration: 10 mins. once only if no other meas. exp. occurs.)  
10 ppm (TWA); 15 ppm (STEL) [Vacated];

Pyrene [CAS No. 129-00-0]

**ACGIH:** A2; BEI; Exposure by all routes should be carefully controlled to levels as low as possible (1990); For Benz[a]anthracene

**OSHA:** 0.2 mg/m<sup>3</sup> (TWA); For benzene-soluble fraction.

**PEL:** Permissible Exposure Limit

**TLV:** Threshold Limit Value

**TWA:** Time-Weighted Average

**STEL:** Short-Term Exposure Limit

**C:** Ceiling

**Engineering Controls:**

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapour, gas, etc.) below recommended exposure limits. Use explosion-proof electrical, ventilating, and lighting equipment.

**PERSONAL PROTECTIVE EQUIPMENT (PPE)**



- Eye/Face Protection:** Wear chemical safety goggles. If product is hot, wear full face-shield. Ensure that eyewash stations are close to the workstation location. Use equipment for eye protection that meets the standards referenced by CSA Standard CAN/CSA-Z94.3 and OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment.
- Hand Protection:** Wear protective gloves. If product is hot, thermally protective gloves are recommended. Rubber gloves (insulated PVC) are recommended. Consult glove manufacturer specifications for further information.
- Skin and Body Protection:** Wear protective clothing. Flame resistant clothing that meets the NFPA 2112 and CAN/CGSB 155.20 standards is recommended in areas where material is stored or handled. Clothing with full length sleeves and pants should be worn.
- Respiratory Protection:** If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator that meets the requirements of CSA Standard CAN/CSA-Z94.4, with organic vapor cartridge, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.
- General Hygiene Considerations:** Handle according to established industrial hygiene and safety practices. Consult a competent industrial hygienist to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.

**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance:</b>	Dark brown to black thick, viscous liquid.
<b>Colour:</b>	Dark brown to black.
<b>Odour:</b>	Tar-like. Rotten eggs. (Slight.)
<b>Odour Threshold:</b>	0.0047 ppm (Hydrogen sulphide)
<b>Physical State:</b>	Liquid.
<b>pH:</b>	Not available.
<b>Melting Point / Freezing Point:</b>	4.4 to 7.2 °C (39.9 to 45 °F)
<b>Initial Boiling Point:</b>	Not available.



## Decanted Oil (Lima)

Date of Preparation: May 14, 2021

### SAFETY DATA SHEET

<b>Boiling Range:</b>	> 371.1 °C (700 °F)
<b>Flash Point:</b>	> 66 °C (150.8 °F) (Closed Cup) Typically: 85 °C (185 °F) (Closed Cup)
<b>Evaporation Rate:</b>	<< 1 (Water = 1)
<b>Flammability (solid, gas):</b>	Not applicable.
<b>Lower Flammability Limit:</b>	Not available.
<b>Upper Flammability Limit:</b>	Not available.
<b>Vapor Pressure:</b>	< 0.3 psi at 54.4 °C (130 °F)
<b>Vapor Density:</b>	> 1 (Air = 1)
<b>Relative Density:</b>	1.08 to 1.12 (Water = 1)
<b>Solubilities:</b>	Soluble in diethyl ether. Partially soluble in acetone. Very slightly soluble in methanol, n-octanol. Insoluble in water.
<b>Partition Coefficient: n-Octanol/Water:</b>	Not available.
<b>Auto-ignition Temperature:</b>	> 427 °C (800.6 °F) Typically: 457.22 °C (855 °F)
<b>Decomposition Temperature:</b>	Not available.
<b>Viscosity:</b>	10 to 100 cSt at 50 °C (122 °F)
<b>Percent Volatile, wt. %:</b>	Not available.
<b>VOC content, wt. %:</b>	Not available.
<b>Density:</b>	Not available.
<b>Coefficient of Water/Oil Distribution:</b>	0

### Section 10: STABILITY AND REACTIVITY

<b>Reactivity:</b>	Contact with incompatible materials. Sources of ignition. Exposure to heat.
<b>Chemical Stability:</b>	Stable under normal storage conditions.
<b>Possibility of Hazardous Reactions:</b>	None known.
<b>Conditions to Avoid:</b>	Contact with incompatible materials. Sources of ignition. Exposure to heat.
<b>Incompatible Materials:</b>	Oxidizers.
<b>Hazardous Decomposition Products:</b>	Hazardous sulphur dioxide, and related oxides of sulphur may be generated upon combustion.



**Section 11: TOXICOLOGICAL INFORMATION****EFFECTS OF ACUTE EXPOSURE****Product Toxicity****Oral:** Not available.**Dermal:** Not available.**Inhalation:** Not available.**Component Toxicity**

<b>Component</b>	<b>CAS No.</b>	<b>LD<sub>50</sub> oral</b>	<b>LD<sub>50</sub> dermal</b>	<b>LC<sub>50</sub></b>
Syntower bottoms	64741-62-4	4300 mg/kg (rat)	Not available.	Not available.
Polycyclic Aromatic Hydrocarbons	130498-29-2	Not available.	Not available.	Not available.
Hydrogen sulphide	7783-06-4	Not available.	Not available.	444 ppm (rat); 4H
Pyrene	129-00-0	800 mg/kg (mouse)	Not available.	170 mg/m <sup>3</sup> (rat); 4H

**Likely Routes of Exposure:** Eye contact. Skin contact. Inhalation. Ingestion. Skin absorption.**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Blood. Cardiovascular system. Bone marrow. Liver. Central nervous system.**Symptoms (including delayed and immediate effects)****Inhalation:** May cause respiratory irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. Excessive inhalation may cause headache, dizziness, confusion, loss of appetite and/or loss of consciousness. This product contains small amounts of Hydrogen sulphide which may accumulate in confined spaces. Inhalation of Hydrogen sulphide may cause loss of sense of smell, major irritation of the respiratory tract, headache, nausea, vomiting, dizziness, and fluid buildup in the lungs (pulmonary edema), which can be fatal. At 300 ppm unconsciousness may occur after 20 minutes. From 300 to 500 ppm, death can occur within minutes of continuous exposure. Above 500 ppm Hydrogen sulphide may cause instantaneous loss of consciousness and immediate death.**Eye:** Causes serious eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision. Hot liquid product may cause serious thermal burns on direct contact.**Skin:** May cause skin irritation. Signs/symptoms may include localized redness, swelling, and itching. Hot liquid product may cause serious thermal burns on direct contact. Exposure to Syntower bottoms may cause a phototoxicity reaction: liquid or mist on the skin may produce a painful sunburn reaction when exposed to sunlight.**Ingestion:** May be fatal if swallowed and enters airways. Hot product may cause thermal burns. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.



**Skin Sensitization:** Not available.

**Respiratory Sensitization:** Not available.

**Medical Conditions Aggravated By Exposure:** Not available.

**EFFECTS OF CHRONIC EXPOSURE (from short and long-term exposure)**

**Target Organs:** Skin. Eyes. Gastrointestinal tract. Respiratory system. Lungs. Blood. Cardiovascular system. Bone marrow. Liver. Central nervous system.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation. This product contains Polycyclic Aromatic Hydrocarbons. Prolonged contact with these compounds has been associated with the induction of skin and lung tumours, anemia, disorders of the liver, bone marrow and lymphoid tissues. Hydrogen sulphide may reduce lung function; cause neurological effects such as headaches, nausea, depression and personality changes; eye and mucous membrane irritation: damage to cardiovascular system.

**Carcinogenicity:** May cause cancer. This material contains Polycyclic Aromatic Hydrocarbons (PAHs), some of which are animal carcinogens.

**Component Carcinogenicity**

Component	ACGIH	IARC	NTP	OSHA	Prop 65
Syntower bottoms	A2	Group 1	List 1	OSHA Carcinogen.	Listed.
Polycyclic Aromatic Hydrocarbons	A2	Not listed.	List 2	OSHA Carcinogen.	Listed.
Pyrene	A2	Group 3	List 2	OSHA Carcinogen.	Listed.

**Mutagenicity:** Not available.

**Reproductive Effects:** Not available.

**Developmental Effects**

**Teratogenicity:** Not available.

**Embryotoxicity:** Not available.

**Toxicologically Synergistic Materials:** Not available.

**Section 12: ECOLOGICAL INFORMATION**

**Ecotoxicity:** Not available.

**Persistence / Degradability:** Not available.

**Bioaccumulation / Accumulation:** Not available.

**Mobility in Environment:** Not available.

**Other Adverse Effects:** Not available.

**Section 13: DISPOSAL CONSIDERATIONS**

**Disposal Instructions:** Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

**Section 14: TRANSPORT INFORMATION****1. When the product is transported at or above 140 °F (60 °C):****U.S. Department of Transportation (DOT)**

**Proper Shipping Name:** UN3256, ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. (Petroleum Oil), 3, PG III

**Class:** 3

**UN Number:** UN3256

**Packing Group:** III

**Label Code:**

**Canada Transportation of Dangerous Goods (TDG)**

**Proper Shipping Name:** UN3256, ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S., 3, PG III

**Class:** 3

**UN Number:** UN3256

**Packing Group:** III

**Label Code:**

**2. When the product is shipped at temperatures below 140 °F (60 °C):****U.S. Department of Transportation (DOT)**

**Proper Shipping Name:** NA1993, COMBUSTIBLE LIQUID, N.O.S. (Petroleum Oil), Combustible liquid, PG III

**Class:** Combustible liquid

**UN Number:** NA1993

**Packing Group:** III

**Label Code:**

**Canada Transportation of Dangerous Goods (TDG)**

**Proper Shipping Name:** Not regulated.

**Class:** Not applicable.

**UN Number:** Not applicable.

**Packing Group:** Not applicable.

**Label Code:** Not applicable.

<b>Section 15: REGULATORY INFORMATION</b>
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**Chemical Inventories****US (TSCA)**

The components of this product are in compliance with the chemical notification requirements of TSCA.

**Canada (DSL)**

The components of this product are in compliance with the chemical notification requirements of the NSN Regulations under CEPA, 1999.

**Federal Regulations****United States**

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**SARA Title III**

Component	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313	RCRA CODE	CAA 112( r ) TQ (lbs.)
Polycyclic Aromatic Hydrocarbons	Not listed.	Not listed.	Not listed.	313	Not listed.	Not listed.
Hydrogen sulphide	500	100	100	313	U135	10000
Pyrene	1,000/10,000	5000	5000	313	Not listed.	Not listed.

**State Regulations****Massachusetts**

US Massachusetts Commonwealth's Right-to-Know Law (Appendix A to 105 Code of Massachusetts Regulations Section 670.000)

Component	CAS No.	RTK List
Syntower bottoms	64741-62-4	Listed.
Polycyclic Aromatic Hydrocarbons	130498-29-2	Listed.
Hydrogen sulphide	7783-06-4	E
Pyrene	129-00-0	E

**Note:** E = Extraordinarily Hazardous Substance

**New Jersey**

US New Jersey Worker and Community Right-to-Know Act (New Jersey Statute Annotated Section 34:5A-5)

Component	CAS No.	RTK List
Syntower bottoms	64741-62-4	SHHS
Hydrogen sulphide	7783-06-4	SHHS
Pyrene	129-00-0	Listed.

**Note:** SHHS = Special Health Hazard Substance



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**SAFETY DATA SHEET**

**Pennsylvania**

US Pennsylvania Worker and Community Right-to-Know Law (34 Pa. Code Chap. 301-323)

Component	CAS No.	RTK List
Syntower bottoms	64741-62-4	S
Polycyclic Aromatic Hydrocarbons	130498-29-2	Listed.
Hydrogen sulphide	7783-06-4	E
Pyrene	129-00-0	E

**Note:** E = Environmental Hazard; S = Special Hazardous Substance

**California**

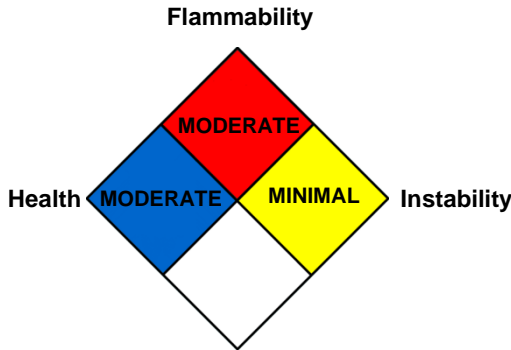
**California Prop 65:**



**WARNING** This product can expose you to chemicals including Hexane, Pyrene and Polycyclic Aromatic Hydrocarbons, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**Section 16: OTHER INFORMATION**

**NFPA 704**



**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 his own particular use.

**Date of Preparation of SDS:** May 14, 2021

**Version:** 2.0

**GHS SDS Prepared by:** Deerfoot Consulting Inc.

**Phone:** (403) 720-3700