GLCC Laurel, LLC

MSDS Number: 01728 Product Name: LSFRTM H

MATERIAL SAFETY DATA SHEET

Effective Date: 09/21/2004

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SECTION I - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name:

LSFRTM H

Manufacturer:

GLCC Laurel, LLC

Address:

P.O. Box 2200

Indiana

City: Zip:

West Lafayette 47996-2200

State:

Emergency Telephone Number:

1-800-949-5167

Fax:

1-765-497-6123

Information Telephone Number: Chemtrec Phone:

1-765-497-6100

1-800-424-9300; Internationally call 703-527-3887

Effective Date:

09/21/2004

Supercede Date:

09/10/2004

MSDS Prepared By: Synonyms:

Regulatory Affairs Department/Great Lakes Chemical Corporation None

Product Use:

Flame Retardant

Chemical Name:

Mixture

Chemical Family:

Metal oxide Blend

Additional Information

No information available

Ingredient Name	CAS No.	%	EXPOSURE LIMITS
Antimony trioxide	1309644	35	Y (Hazardous)
			0.5 mg/m3 as Sb (OSHA PEL TWA)
		ļ	Not established (OSHA PEL STEL)
		ĺ	Not established (OSHA PEL CEIL)
			0.5 mg/m3 as Sb (ACGIH TLV TWA)
		ŀ	Not established (ACGIH TLV STEL)
			Not established (ACGIH TLV CEIL)
Arsenic	7440382	0.4	Y (Hazardous)
		maximum	0.01 mg/m3 (OSHA PEL TWA)
			Not established (OSHA PEL STEL)
			Not established (OSHA PEL CEIL)
			0.01 mg/m3; A1 (ACGIH TLV TWA)
			Not established (ACGIH TLV STEL)
			Not established (ACGIH TLV CEIL)
Calcium stearate	1592230	TS	N (Hazardous)
			15 mg/m3 (PNOR) (OSHA PEL TWA)
			Not established (OSHA PEL STEL)
		ļ	Not established (OSHA PEL CEIL)
			10 mg/m3 (PNOC) (ACGIH TLV TWA)
			Not established (ACGIH TLV STEL)
		1	Not established (ACGIH TLV CEIL)
Crystalline silica, quartz	14808607	>0.1%	Y (Hazardous)
]	See Additional Information (OSHA PEL TWA)
		İ	Not established (OSHA PEL STEL)
			Not established (OSHA PEL CEIL)
			0.5 mg/m3 R, A2 (ACGIH TLV TWA)
		1	Not established (ACGIH TLV STEL)
			Not established (ACGIH TLV CEIL)

MARKETED BY

HARWICK STANDARD **DISTRIBUTION CORPORATION**

MSDS Number: 01728 Effective Date: 09/21/2004

Product Name: LSFRTM H Page: 2 of 11

Lead	7439921	0.2	Y (Hazardous)
		maximum	0.05 mg/m3 (OSHA PEL TWA)
			Not established (OSHA PEL STEL)
		ł	Not established (OSHA PEL CEIL)
			0.05 mg/m3; A3 (ACGIH TLV TWA)
			Not established (ACGIH TLV STEL)
			Not established (ACGIH TLV CEIL)
Limestone	1317653	TS	Y (Hazardous)
		į į	15 mg/m3 (Total dust) (OSHA PEL TWA)
			Not established (OSHA PEL STEL)
			Not established (OSHA PEL CEIL)
			10 mg/m3* (ACGIH TLV TWA)
			Not established (ACGIH TLV STEL)
	İ		Not established (ACGIH TLV CEIL)
Zinc oxide	1314132	20	Y (Hazardous)
			15 mg/m3 (Total Dust) (OSHA PEL TWA)
			Not established (OSHA PEL STEL)
			Not established (OSHA PEL CEIL)
			10 mg/m3 (ACGIH TLV TWA)
			Not established (ACGIH TLV STEL)
***			Not established (ACGIH TLV CEIL)

*Indented chemicals are components of previous ingredient.

Additional Information

Additional exposure limits:

Antimony trioxide:

NIOSH REL = 0.5 mg/m3

Arsenic:

NIOSH REL = C0.002 mg/m3 (15 minutes)

OSHA 29 CFR 1910.1018

Lead:

NIOSH REL = <0.1 mg/m3 (Blood Pb<0.06 mg/100 g whole blood)

OSHA 29 CFR 1910.1025

Zinc oxide:

OSHA TWA = 5 mg/m3 (Respirable dust)

OSHA TWA as fume = 5 mg/m3

ACGIH TWA as fume = 5 mg/m3

ACGIH STEL as fume = 10 mg/m3

Calcium carbonate:

OSHA TWA = 5 ppm (Respirable fraction)

NIOSH TWA = 10 mg/m 3 (Total dust)

NIOSH TWA = 5 mg/m3 (Respirable fraction)

*This value is for particulate matter containing no asbestos and <1% crystalline silica.

Crystalline silica:

OSHA PEL (respirable dust) = (10 mg/m3)/(% SiO2 + 2)

OSHA PEL (total dust) = (30 mg/m3)/(% SiO2 + 2)

NIOSH REL TWA = 0.05 mg/m3 (respirable dust), Ca

5 mg/m3 Respirable Dust Level (OSHA)

3 mg/m3 Respirable Dust Level (ACGIH)

PNOR = Particulates Not Otherwise Regulated

PNOC = Particulates Not Otherwise Classified

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview:

White powder

No odor

DANGER. CONTAINS INORGANIC ARSENIC. CANCER HAZARD. HARMFUL IF INHALED OR SWALLOWED. USE ONLY WITH

MSDS Number: 01728 **Effective Date:** 09/21/2004 Product Name: LSFR™ H Page: 3 of 11

SECTION III - HAZARDS IDENTIFICATION

ADEQUATE VENTILATION OR RESPIRATORY PROTECTION.

Causes eye irritation. May cause skin irritation.

May cause respiratory tract irritation. Ingestion, inhalation and skin absorption

Relevant Routes of Exposure: Signs and Symptoms of Overexposure:

General reddening, irritation and eruptions of the skin. Mechanical irritation of the eyes and respiratory tract. Shortness of breath, nosebleeds, headache,

dizziness, nausea and vomiting, stomach pain and diarrhea.

Acute arsenic poisoning is rare in industry. Prolonged contact may have corrosive effects to skin and mucous membranes. Chronic arsenic poisoning due to long term inhalation exposure manifest in phases. Initial symptoms may include weakness, anorexia (loss of appetite), nausea, vomiting, heaviness in stomach, and diarrhea. Secondly; conjunctivitis, coryza, hoarseness, mild tracheobronchitis, perforation of the nasal septum, and skin lesions may occur. More severe symptoms could include peripheral neuritis and on rare occasions

motor paralyses.

Medical Conditions Generally

Aggravated By Exposure: **Dermatitis**

Potential Health Effects: See Section XI for additional information. Eyes: May cause slight eye irritation.

Skin: May cause skin irritation.

Repeated or prolonged skin contact may cause a dermatitis termed ""antimony spots"". Symptoms may include intense itching followed by skin eruptions that

are most common in areas of friction and sweating.

Ingestion: Prolonged and excessive ingestion of antimony trioxide may cause

gastrointestinal upset, ulcers, blood effects, liver effects, neurological effects, inflammation of mucous membranes and stomatitis. The similarity of these symptoms with those of other illnesses require that excessive absorption of

antimony be verified by biological specimens.

Ingestion of large quantities may result in intestinal obstruction and/or

constipation.

Inhalation: May cause respiratory tract irritation.

> Prolonged and excessive inhalation exposures to antimony or antimony trioxide may result in inflammation of the lungs, airway obstruction, bronchospasm. chronic bronchitis, reproductive effects, cardiovascular effects, gastrointestinal

upset, liver effects, and neurological effects.

Chronic Health Effects: Prolonged and excessive inhalation or ingestion exposures to antimony or

antimony trioxide may result in inflammation of the lungs, airway obstruction. bronchospasm, chronic bronchitis, reproductive effects, cardiovascular effects, gastrointestinal upset, ulcers, liver effects, blood effects and neurological effects.

Antimony trioxide has been classified by IARC as a Class 2B. An IARC 2B material exhibits sufficient evidence in animal tests (possible human carcinogen). Antimony trioxide production has been determined by ACGIH to be a carcinogenic risk. Antimony trioxide has been identified by the EPA as a suspected lung carcinogen (IARC Class 2B). For additional information see

Arsenic has been designated as a carcinogen, causing lung and skin cancer. Lead has been classified by IARC as a possible human carcinogen (Class 2B). Human evidence is inadequate and animal evidence is sufficient for this IARC classification. ACGIH states that other sources have identified this material as a suspected or confirmed human carcinogen and has classed it as a Category A3, Animal Carcinogen. Chronic overexposure to lead may result in blood, central

nervous system, kidney and reproductive effects.

Arsenic has been classified by IARC, NTP, OSHA, NIOSH, EPA, and ACGIH as

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SECTION III - HAZARDS IDENTIFICATION

a confirmed carcinogen.

Long term inhalation exposure to crystalline silica may result in lung effects such

as silicosis, pulmonary fibrosis, pulmonary function effects and cancer.

Crystalline silica has been classified by NTP as a known human carcinogen. IARC has determined that carcinogenicity evidence in animals is sufficient. ACGIH has listed crystalline silica as a suspected human carcinogen. NIOSH has

defined crystalline silica as a carcinogen.

Carcinogenicity:

NTP: Yes **ACGIH:** Yes IARC: Yes OTHER: Yes OSHA:

Additional Information

No information available

SECTION IV - FIRST AID MEASURES

Yes

Flush with large volumes of water for at least 15 minutes. Get medical attention. Eves: Skin:

Wash with large volumes of soap and water for at least 15 minutes. If irritation

develops, get medical attention.

Ingestion: If conscious, give person 1 to 2 glasses of water. Get medical attention

immediately.

Inhalation: Remove person to fresh air. Get medical attention.

Antidotes: No information available

Notes to Physicians and/or Protection

for First-Aiders: No information available

Additional Information

No information available

SECTION V - FIRE FIGHTING MEASURES

Flammable Limits in Air (% by

Volume): Not available Flash Point: Not available **Autoignition Temperature:** Not available

Extinguishing Media: All conventional media are suitable.

Fire Fighting Instructions: Wear a self-contained breathing apparatus and protective clothing to prevent skin

and eye contact in fire situations.

Unusual Fire and Explosion Hazards:

Under fire conditions, toxic and irritating fumes may be emitted.

Flammability Classification:

Known or Anticipated Hazardous

Non-flammable solid

Products of Combustion: Oxides of antimony

Oxides of zinc Oxides of arsenic Oxides of lead

Additional Information

No information available

SECTION VI - ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Contain spill.

Wearing appropriate personal protective equipment, carefully sweep up material

and place in suitable labeled containers for disposal.

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SECTION VI - ACCIDENTAL RELEASE MEASURES

Residual dusts can be removed by vacuuming with a high-efficiency particulate

filter vacuum.

Wash spill area after pick-up is complete, collecting all clean up water for

appropriate disposal.

Personal Precautions: See Section VIII.

Environmental Precautions: Avoid releasing to the environment.

Additional Information

No information available

SECTION VII - HANDLING AND STORAGE

Handling: Use appropriate personal protection equipment.

Avoid eye, skin and clothing contact.

Avoid breathing dust.

Avoid repeated and prolonged contact.

Avoid creating a dusting situation.

Use only in a well ventilated area.

Storage: Store in a cool, dry, well-ventilated area away from incompatible materials.

Keep container tightly closed.
Protect containers against damage.

Other Precautions: Keep away from food, drink, tobacco products, and cosmetics.

Additional Information

No information available

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Adequate general ventilation is recommended when handling to control airborne

levels.

Ventilation Requirements: Use local ventilation to keep levels below established threshold values.

Use mechanical ventilation for general area control.

Refer to OSHA 29 CFR 1910.94 for ventilation guidelines.

Portable vacuum systems equipped with HEPA filters or high efficiency filters

should be utilized for jobs outside normal ventilation areas.

Personal Protective Equipment:

Eye/Face Protection: Chemical safety glasses with side shields or chemical safety goggles

Skin Protection: Chemical resistant gloves

Clothing designed to minimize skin contact

Respiratory Protection: Wear a NIOSH/MSHA approved dust respirator if dusting occurs, or there is

potential for airborne exposures to exceed established threshold values.

Consult the OSHA respiratory protection information located at 29CFR 1910.134

and the American National Standard Institute's Practices of Respiratory

Protection Z88.2.

Other Protective Clothing or

Equipment:

No information available

Exposure Guidelines:

See Section II.

Work Hygienic Practices: Wash thoroughly after handling.

Work clothing should not leave worksite. Wash contaminated clothing before reuse.

Keep work areas clean.

Do not eat, drink, chew gum, use tobacco products, or apply cosmetics in work

areas.

Additional Information

No information available

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SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

White powder Appearance: Percent Volatile: Not available **Boiling Point:** Not available pH Value: Not available **Bulk Density:** 40 - 75 lb/ft3 pH Concentration: Not available Color: White Physical State: Solid **Decomposition Temperature:** Not available Reactivity in Water: Not water reactive **Evaporation Rate:** Not available Saturated Vapor Concentration: Not available Freezing Point: Not available Softening Point: Not available Heat Value: Not available Solubility in Water: Slightly soluble **Melting Point:** Not available Specific Gravity or Density (Water=1): Molecular/Chemical Formula: Mixture Vapor Density: Not available Molecular Weight: NA Vapor Pressure: Not available Octanol/Water Partition Coefficient: Not available Viscosity: Not available Odor: No odor Volatile Organic Compounds: Not available **Odor Threshold:** Not available Water/Oil Distribution

Additional Information

No information available

Particle Size:

SECTION X - STABILITY AND REACTIVITY

Stability: Stable under normal conditions of handling and use.

Not available

Conditions to Avoid: None known

Incompatibility With Other Materials:

Strong acids
Strong bases
Hot perchloric acid
Strong oxidizers

Hazardous Decomposition Products:

Thermal decomposition may produce the following:

Coefficient:

Weight Per Gallon:

Not available

Not available

Oxides of antimony Oxides of zinc Oxides of arsenic Oxides of lead Will not occur

Hazardous Polymerization: Will not occur

Conditions to Avoid: None

Additional Information

No information available

SECTION XI - TOXICOLOGICAL INFORMATION

VALUE (LD50 or LC50)	ANIMAL	Routes	COMPONENTS
>10 g/kg	Mouse and Rat	Acute Oral	Calcium Stearate
2,500 mg/m3	Mouse	Acute Inhalation	Zinc oxide
>10 g/kg	Mouse	Acute Intraperitoneal	Calcium Stearate
145 mg/kg	Mouse	Acute Oral	Arsenic
7,950 mg/kg	Mouse	Acute Oral	Zinc oxide
172 mg/kg	Mouse	Acute Intraperitoneal	Antimony trioxide
46,200 ug/kg	Mouse	Acute Intraperitoneal	Arsenic
>2,000 mg/kg	Rabbit	Acute Dermal	Antimony trioxide
240 mg/kg	Rat	Acute Intraperitoneal	Zinc oxide
13,390 ug/kg	Rat	Acute Intraperitoneal	Arsenic
763 mg/kg	Rat	Acute Oral	Arsenic

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SECTION XI - TOXICOLOGICAL INFORMATION					
>34,600 mg/kg	Rat	Acute Oral	Antimony trioxide		
>8,437 mg/kg	Rat	Acute Oral	Zinc oxide		
3,250 mg/kg	Rat	Acute Intraperitoneal	Antimony trioxide		

Toxicological Information:

The toxicological properties of this blend have not been determined. Component information is listed below.

Antimony trioxide:

May cause skin irritation. Causes eye irritation. In animals, cataracts have been produced; however, this effect is not reported in humans.

Prolonged and excessive inhalation exposures to antimony or antimony trioxide may result in inflammation of the lungs, airway obstruction, bronchospasms, chronic bronchitis, reproductive effects, cardiovascular effects, gastrointestinal upset, liver effects, and neurological effects (muscle weakness, abnormal gait).

Prolonged and excessive oral exposure may result in gastrointestinal discomfort and ulcers, blood effects, liver effects, neurological effects, inflammation of mucous membranes and stomatitis.

In a recent 90 day oral study in male and female rats, no adverse effects were observed at doses of 1000, 5000 and 20000 ppm. The No Adverse Effect Level for antimony trioxide was 20000 ppm for both sexes.

In a developmental study in Sprague-Dawley rats consisting of three treatment groups and a control group, each containing 26 females at doses of 2.6, 4.4 and 6.3 mg/m3, not developmental effects were observed. The LOAEL for maternal toxicity was established at 2.6 mg/m3. The NOEL for developmental toxicity was 6.3 mg/m3, the highest exposure level evaluated.

Antimony trioxide has been classified by IARC as a Class 2B. An IARC 2B material exhibits sufficient evidence in animal tests (possible human carcinogen). Antimony trioxide production has been determined by ACGIH to be a carcinogenic risk. Antimony trioxide has been identified by the EPA as a suspected lung carcinogen. Historical studies have concluded that exposure to elevated levels of antimony oxide may cause lung carcinoma. However, the most recent study conducted under the EPA's Voluntary Test Program by the Antimony Oxide Industry Association (AOIA), has concluded that antimony does not cause lung cancer in rats at occupational exposure levels. The levels tested ranged from 0.05 mg/L to 5 mg/L (from one-tenth to ten times the OSHA TWA Threshold Limit Value).

Arsenic:

Arsenic is toxic by inhalation, ingestion and skin absorption. Arsenic has been found to be a cancer hazard in humans, causing lung, liver, kidney, bladder and skin cancer.

Lead:

Lead has been found to be harmful by ingestion or inhalation. Short term exposures can lead to acute encephalopathy which can develop quickly to seizures, coma and death from cardiorespiratory arrest. Chronic overexposure to lead may result in severe damage to blood-forming, nervous, urinary and reproductive systems. Damage to the central nervous system in general and the brain in particular is one of the most severe forms of lead poisoning. Kidney disease can occur with out symptoms and not be detected until two-thirds of kidney function is lost. Lead impairs the reproductive system of both men and women, resulting in impotence, sterility, decreased fertility and abnormal menstrual cycles. Developmental effects may result from either parent being exposed to excess lead levels. Lead has been classified by IARC as a possible human carcinogen (Class 2B). Human evidence is inadequate and animal evidence is sufficient for this IARC classification. ACGIH states that other sources have identified this material as a suspected or confirmed human carcinogen and has classed it as a Category A3, Animal Carcinogen.

Zinc oxide:

This material may be harmful if inhaled, swallowed or absorbed through the skin. Prolonged skin contact may cause a severe dermatitis called oxide pox. Inhalation may cause mucous membrane and upper respiratory tract irritation. Severe inhalation overexposure may cause bronchitis or pneumonia. Chronic ingestion of dust may cause peptic ulcerations, gastrointestinal hemorrhage and diarrhea. Prolonged exposure may also cause reversible liver enzyme abnormalities.

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Calcium stearate: An acute inhalation lethal concentration in an unspecified mammal was established to be greater than 1,241 mg/m3/4H. With the exception of possible mechanical eye, skin and respiratory tract irritation, acute and chronic health hazards, as well as target organs, are not known.

Calcium carbonate:

This material has been found to cause mild eye and skin irritation. Repeated or prolonged exposure may have a drying effect on the skin. Ingestion of large quantities may result in intestinal obstruction and/or constipation. Can be irritating to the respiratory system. Chronic exposure to respirable calcium carbonate dust at concentrations exceeding occupational exposure limits may increase the risk of developing lung disease.

Crystalline silica:

Long term inhalation exposure to crystalline silica may result in lung effects such as silicosis, pulmonary function effects and cancer.

Crystalline silica has been classified by NTP as a known human carcinogen. IARC has determined that carcinogenicity evidence in animals is sufficient. ACGIH has listed crystalline silica as a suspected human carcinogen. NIOSH has defined crystalline silica as a carcinogen.

Other acute and chronic health hazards, as well as target organs, are unknown.

As with all dusts, inhalation of air concentration levels above the PNOR may cause irritation and adverse lung effects.

Additional Information

No information available

SECTION XII - ECOLOGICAL INFORMATION

Ecological Information:

The following ecological information is offered:

For antimony ion (Sb 3+)

LC50 (96H) in Fathead minnow (Pimephales promelas) = 21.9 mg/L

LC50 (48H) in Daphnia magna =18.8 mg/L

In a chronic study in Daphnia magna, a 21 day NOEC for reproduction toxicity was established at 1.74 mg/L.

In a 42-day chronic sediment test with Hyalella azteca, growth effects after 28 days resulted in a NOEC of 124 mg/kg dw.

In a 42-day soil toxicity test with Enchytraeus albidus, mortality and

reproduction resulted in the same NOEC and LOEC values of 760 mg/kg dw and 2,012 mg/kg dw, respectively.

Inhibition action on bacteria (Pseudomonas putida): At 3.5 mg/L no inhibiting action.

EbC50 in Alga Rhaphidocelis subcapitata (72H) >2.4 mg/L ErC50 in Alga Rhaphidocelis subcapitata (72H) >2.4 mg/L

Avoid releasing to the environment.

Additional Information

No information available

SECTION XIII - DISPOSAL CONSIDERATIONS

Disposal Considerations:

Dispose of waste at an approved chemical disposal facility in compliance with all current Local, State/Province, Federal/Canadian laws and regulations.

Additional Information

No information available

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SECTION XIV - TRANSPORT INFORMATION

U.S. DOT

Proper Shipping Name: Not regulated for containers less than 250 lb.

For containers 250-2,856 lb:

Environmentally hazardous substances, solid, n.o.s. (Contains Arsenic)

See Additional Information.

Hazard Class: Packing Group: Ш

ID Number: Labels:

UN3077 Miscellaneous

Special Provisions: Non-Bulk Packaging: Passenger Air/Rail Limit:

8, B54, IB8, N20 213

Packaging Exceptions: 155 **Bulk Packaging:** 240 Air Cargo Limit: None Other Stowage: N/A

Reportable Quantity:

Vessel Stowage:

See Below

None

Α

AIR - ICAO OR IATA

Proper Shipping Name: Hazard Class:

N/A

Not regulated unless covered by a State or operator variation. ID Number: Packing Group:

N/A N/A N/A

Subsidiary Risk: **Hazard Labels:** Air Passenger Limit Per Package: N/A N/A N/A

N/A

Packing Instructions: Packing Instruction -

N/A

Air Cargo Limit Per Package:

N/A

Cargo: Special Provisions Code:

N/A

WATER - IMDG

Proper Shipping Name: Not regulated

Hazard Class: N/A **Packing Group:** N/A ID Number: Subsidiary Risk: N/A N/A

Medical First Aid Guide Code:

Additional Information

For containers 2,857-4,999 lb:

Environmentally hazardous substances, solid, n.o.s. (Contains Arsenic and Antimony Trioxide)

For containers 5,000 lb or greater:

Environmentally hazardous substances, solid, n.o.s. (Contains Arsenic, Lead and Antimony Trioxide)

RQ for antimony trioxide = 1,000 lb

RO for arsenic = 1 lb

RQ for lead = 10 lb

SECTION XV - REGULATORY INFORMATION

U.S. Federal Regulations:

The components of this product are either on the TSCA Inventory or exempt (i.e. impurities, a polymer complying with the exemption rule at 40 CFR 723.250) from the Inventory.

For arsenic see OSHA 29 CFR 1910.1018.

For lead see OSHA 29 CFR 1910.1025.

The following materials are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Antimony trioxide (de minimis concentration = 1%)

Arsenic (de minimis concentration = 0.1%)

Lead (de minimis concentration = 0.1%)

Zinc oxide (Zinc compound, de minimis concentration = 1%)

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SECTION XV - REGULATORY INFORMATION

CERCLA Reportable Quantities:

Antimony trioxide RQ = 1,000 lb

Arsenic RQ = 1 lb Lead RO = 10 lb

State Regulations:

Antimony trioxide:

New Jersey Right To Know Hazardous Substance List (1% reporting limit)

Massachusetts Substance List

Pennsylvania Environmental Hazard List

California Proposition 65: WARNING: This product contains a chemical known to the State of California to cause cancer.

Zinc oxide:

Pennsylvania Environmental Hazard List

New Jersey Right To Know Hazardous Substance List (1% reporting limit)

Arsenic:

Massachusetts Substance List - Carcinogen

New Jersey Special Health Hazard Substance List (0.1% reporting limit)

Pennsylvania Environmental Hazard List and Special Hazardous Substance List

California Proposition 65: No-significant risk levels are 0.06 ug/day (inhalation) and 10 ug/day (except inhalation)

WARNING: This product contains a chemical known to the State of California to cause cancer and reproductive toxicity.

Lead:

Massachusetts Substance List - Teratogen with sufficient evidence of risk in humans

New Jersey Special Health Hazard Substance List (0.1% reporting limit)

Pennsylvania Environmental Hazard List

California Proposition 65: Acceptable intake level is 0.5 ug/day

WARNING: This product contains a chemical known to the State of California to cause developmental and reproductive toxicity.

Calcium carbonate:

Massachusetts Substance List

Pennsylvania Hazardous Substance List (1% reporting limit)

Crystalline silica:

Massachusetts Extraordinarily Hazardous Substance (1 ppm reporting limit) - Carcinogen

New Jersey Right To Know Hazardous Substance List (1% reporting limit)

Pennsylvania Hazardous Substance List (1% reporting limit)

California Proposition 65 - WARNING: This product contains a chemical known to the State of California to cause cancer.

International Regulations:

This material (or each component) is listed on the following inventories:

Canada - DSL or exempt naturally occurring component

EU - EINECS

Australia - AICS

Japan - ENCS or exempt naturally occurring component

Korea - ECL

Philippines - PICCS

China - List I

Canadian Disclosure List (1%)- Antimony trioxide

Canadian Disclosure List (1%) - Zinc oxide

Canadian Disclosure List (0.1%)- Arsenic

Canadian Disclosure List (0.1%)- Lead

Canadian Disclosure List (1%) - Crystalline quartz

Canadian WHMIS Hazard Class and Division = D.2.a, D.2.b

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SECTION XV - REGULATORY INFORMATION

SARA Hazards:

Acute: Yes Chronic: Yes Reactive: No Fire: No Pressure: No

Additional Information

The above regulatory information represents only selected regulations and is not meant to be a complete list.

SECTION XVI - OTHER INFORMATION

NFPA Codes:

Health: 2 Flammability: 0
Reactivity: 0 Other: N

HMIS Codes: * indicates chronic health hazard.

Health: 2* Flammability: 0

Health: 2* Flammability: 0
Reactivity: 0 Protection: X

Label Statements: DANGER. CONTAINS INORGANIC ARSENIC. CANCER HAZARD.

HARMFUL IF INHALED OR SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION OR RESPIRATORY PROTECTION.

Other Information: Abbreviations:

(L) = Loose bulk density in g/ml

LOEC = Lowest observed effect concentration

MATC = Maximum acceptable toxicant concentration

NA = Not excelled.

NA = Not available N/A = Not applicable NL = Not limited

NOAEL = No observable adverse effect level NOEC = No observed effect concentration NOEL = No observable effect level

NR = Not rated

(P) = Packed bulk density in g/ml

PNOC = Particulates Not Otherwise Classified PNOR = Particulates Not Otherwise Regulated REL = Recommended exposure limit

TS = Trade secret

Additional Information

Information on this form is furnished solely for the purpose of compliance with OSHA's Hazard Communication Standard, 29CFR 1910.1200 and The Canadian Environmental Protection Act, Canada Gazette Part II, Vol. 122, No. 2 and shall not be used for any other purpose.

Revision Information:

Section II - Composition

Section III - Chronic Health Effects

Section XI - Toxicological information

Section XV - State Regulations: International inventories