



MATERIAL SAFETY DATA SHEET

Section 1 – Chemical Product / Company Information

Product Name: CAFCO® SprayFilm® WB 4™ /WB 4TG™
ISOLATEK® TYPE WB 4™

Effective Date: 3/12/12

Manufacturer: Isolatek International
41 Furnace Street
Stanhope, NJ 07874 USA
973-347-1200

Supersedes: 10/15/08, 8/5/09

Preparer: R&D Department

Product Use: Fire Protection

CHEMTREC Transportation

Emergency Phone #: 800-424-9300 / 703-527-3887 (Intl.)

Usage Restrictions: None known

Section 2 – Composition / Information On Ingredients

CAS	Component	Wt. %
Proprietary	Proprietary Component 1	7-13
Proprietary	Proprietary Component 2	7-13
Proprietary	Proprietary Component 3	7-13
Proprietary	Proprietary Component 4	7-13
Proprietary	Proprietary Component 5	3-7
Proprietary	Proprietary Component 6	1-5

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Titanium compounds, glass, and wool fiber.

Section 3 – Hazards Identification

NFPA Ratings: Health: 2 Fire: 1 Reactivity: 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Emergency Overview: May cause irritation to the respiratory tract.

POTENTIAL EFFECTS OF OVEREXPOSURE

Inhalation: Irritation, cough, nausea, difficulty breathing

Skin: Irritation

Eye: Irritation

Ingestion: Gastrointestinal irritation, stomach pain, diarrhea

Medical Conditions Prone to Aggravation by Exposure: Sensitive skin; respiratory conditions

Section 4 – First Aid Measures

Skin Contact: Wash affected area with soap and water for at least 15 minutes. If irritation persists, seek medical attention.

Eyes: Flush eyes with clean water for at least 15 minutes. If irritation persists, seek medical attention.

Inhalation: If adverse effects occur, remove to fresh air. If irritation persists, seek medical attention.

Ingestion: If swallowed, do not induce vomiting. If irritation persists, seek medical attention.

Section 5 – Fire Fighting Measures

See Section 9 for Flammability Properties

Flammable Properties

Slight fire hazard.

Extinguishing Media

Regular dry chemical, carbon dioxide, water, foam

Unsuitable Extinguishing Media

High-pressure water streams

Protective Equipment and Precautions for Firefighters

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

Fire Fighting Measures

Move container from fire area if it can be done without risk. Do not scatter spilled material with high-pressure water streams. Dike for later disposal. Use extinguishing agents appropriate for surrounding fire. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

Hazardous Combustion Products

Combustion: ammonia, oxides of carbon, oxides of nitrogen, oxides of phosphorus, oxides of titanium

Section 6 – Accidental Release Measures

Occupational spill/release

Stop leak if possible without personal risk. **Small spills:** Absorb with sand or other non-combustible material. Collect spilled material in appropriate container for disposal. Keep unnecessary people away, isolate hazard area and deny entry.

Section 7 – Handling And Storage

Handling Procedures

Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Wash thoroughly after handling.

Storage Procedures

Store in accordance with all current regulations and standards. Avoid extreme heat and cold. Store above freezing. Keep separated from incompatible substances such as strong acids, bases or oxidants.

Section 8 – Exposure Controls / Personal Protection

Component Exposure Limits

Proprietary Component 1 (Proprietary)

ACGIH: 10 mg/m³ TWA

NIOSH: 5000 mg/m³ IDLH

OSHA (US): 15 mg/m³ TWA (total dust)

Mexico: 10 mg/m³ TWA (as Ti)

20 mg/m³ STEL (as Ti)

Proprietary Component 3 (Proprietary)

ACGIH: 10 mg/m³ TWA

NIOSH: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable dust)

OSHA (US): 15 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction)

Mexico: 10 mg/m³ TWA

20 mg/m³ STEL

Proprietary Component 4 (Proprietary)

ACGIH: 1 fiber/cm³ TWA (respirable fibers: length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination)

NIOSH: 3 fiber/cm³ TWA (fibers ≤ 3.5 µm in diameter and ≥ 10 µm in length); 5 mg/m³ TWA (total)

Proprietary Component 5 (Proprietary)

ACGIH: 1 mg/m³ TWA (respirable fraction, related to Aluminum insoluble compounds)

Proprietary Component 6 (Proprietary)

ACGIH: 20 ppm TWA

NIOSH: 5 ppm TWA; 24 mg/m³ TWA

Potential for dermal absorption

700 ppm IDLH

Europe: 20 ppm TWA; 98 mg/m³ TWA

Possibility of significant uptake through the skin

50 ppm STEL; 246 mg/m³ STEL

OSHA (US): 50 ppm TWA; 240 mg/m³ TWA

Prevent or reduce skin absorption

Mexico: 26 ppm TWA; 120 mg/m³ TWA

75 ppm STEL; 360 mg/m³ STEL

Skin – potential for cutaneous absorption

Ventilation

Provide ventilation to ensure compliance with applicable exposure limits.

Section 8 – Exposure Controls / Personal Protection - Continued

PERSONAL PROTECTIVE EQUIPMENT

Eyes/Face

Wear splash resistant safety goggles.

Protective Clothing

Wear typical long sleeve work clothing or a "TYVEK®" type suit.

Glove Recommendations

Wear cloth, rubber or latex type gloves.

Respiratory Protection

A dust mask should be used in cases where individuals are exposed to airborne mists of the material.

Section 9 – Physical And Chemical Properties

Physical State:	Liquid	Appearance:	White paste
Color:	white	Physical Form:	paste
Odor:	mild odor	Odor Threshold:	Not available
pH:	7-9	Melting/Freezing Point:	Not available
Boiling Point:	210-215 °F	Decomposition:	300 °F (initial)
Flash Point:	>200 °F (SCC)	Evaporation Rate:	1 (water=1)
LEL:	Not available	UEL:	Not available
Vapor Pressure:	Not available	Vapor Density (air = 1):	Not available
Density:	Not available	Specific Gravity (water = 1):	1.1 – 1.5
Water Solubility:	partial (~30%)	Auto Ignition:	Not available
Coeff. Water/Oil Dist:	Not available	VOC:	0 g/L
Volatility:	Not available	Oxidizing Properties:	Not available
Burning Rate:	Not available	Explosive Properties:	Not available

Section 10 – Stability And Reactivity

Chemical Stability

Stable at normal temperatures and pressure.

Conditions to Avoid

Avoid high temperatures or freezing. Avoid contact with incompatible materials.

Materials to Avoid

Oxidizing materials, strong bases

Hazardous Decomposition

Combustion: ammonia, oxides of carbon, oxides of nitrogen, oxides of phosphorus, oxides of titanium

Possibility of Hazardous Reactions

Will not polymerize.

Section 11 – Toxicological Information

Component Analysis - LD50/LC50

The components of this material have been reviewed in various sources and the following selected endpoints are published:

Proprietary Component 1 (Proprietary)

Oral LD50 Rat >10000 mg/kg

Proprietary Component 2 (Proprietary)

Oral LD50 Rat 3161 mg/kg; Dermal LD50 Rabbit >1000 mg/kg

Proprietary Component 3 (Proprietary)

Oral LD50 Rat 10000 mg/kg

Proprietary Component 5 (Proprietary)

Oral LD50 Rat > 5000 mg/kg

Proprietary Component 6 (Proprietary)

Inhalation LC50 Rat 2.21 mg/L 4h; Inhalation LC50 Rat 450 ppm 4 h; Oral LD50 Rat 470 mg/kg;

Dermal LD50 Rat 2270 mg/kg; Dermal LD50 Rabbit 220 mg/kg

RTECS:

Proprietary Component 6 (Proprietary)

Inhalation: 450 ppm/4 hour Inhalation Rat LC50; 2900 mg/m³/7 hour Inhalation Rat LC50

Oral: 250 mg/kg Oral Rat LD50; 917 mg/kg Oral Rat LD50

Skin: 220 mg/kg Skin Rabbit LD50

Section 11 – Toxicological Information – Continued

Carcinogenicity:

Proprietary Component 5 (Proprietary)

ACGIH: A4 - Not Classifiable as a Human Carcinogen (related to Aluminum insoluble compounds)

Proprietary Component 6 (Proprietary)

ACGIH: A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

IARC: Monograph 88 [2006] (Group 3) (not classifiable)

DFG: Category 4 (no significant contribution to human cancer)

RTECS Irritation:**Proprietary Component 6 (Proprietary)**

100 mg/24 hour Eyes Rabbit moderate; 100 mg Eyes Rabbit severe; 500 mg/open Skin Rabbit mild

Medical Conditions Aggravated by Exposure: Liver disorders, kidney disorders

Reproductive Effects – Available data characterizes this substance as a reproductive hazard.

Section 12 – Ecological Information**Component Analysis – Aquatic Toxicity****Proprietary Component 2 (Proprietary)**

Fish: 96 Hr LC50 Poecilia reticulata: > 3000 mg/L

Algae: 96 Hr EC50 Scenedesmus pannonicus: 940 mg/L

Invertebrate: 48 Hr EC50 Daphnia magna: >2000 mg/L

Proprietary Component 3 (Proprietary)

Fish: 48 Hr LC50 Oryzias latipes: 50000 mg/L [semi-static]

Invertebrate: 24 Hr EC50 Daphnia magna: 38900 mg/L; 48 Hr EC50 Daphnia magna: 30477 – 37043 mg/L [static]

Proprietary Component 6 (Proprietary)

Fish: 96 Hr LC50 Lepomis macrochirus: 1490 mg/L [static]; 96 Hr LC50 Lepomis macrochirus: 2950 mg/L

Invertebrate: 24 Hr EC50 Daphnia magna: 1698 – 1940 mg/L; 48 Hr EC50 Daphnia magna: > 1000 mg/L

Section 13 – Disposal Information**Disposal Methods**

Dispose in accordance with all applicable regulations.

Component Waste Numbers

The U.S. EPA has not published waste numbers for this product's components.

Section 14 – Transportation Information

US DOT Information: Not regulated.

Section 15 – Regulatory Information**U.S. Federal Regulations**

None of this products components are listed under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312

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

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Proprietary Component 1	Proprietary	No	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹
Proprietary Component 2	Proprietary	No	Yes	No	No	Yes	No
Proprietary Component 3	Proprietary	No	Yes ¹	Yes ¹	Yes ¹	Yes ¹	Yes ¹
Proprietary Component 4 (related to: Glass wool fiber)	Proprietary	Yes ¹	Yes ¹	Yes ¹	No	Yes ¹	Yes ¹
Proprietary Component 6	Proprietary	Yes	Yes	Yes	Yes	Yes	Yes

¹. In an airborne (dry or wet mist) form.**California Proposition 65**

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the State of California to cause cancer.**U.S. Inventory (TSCA)**

All the components of this substance are listed on or are exempt from the inventory.

Section 15 – Regulatory Information - Continued

Component Analysis - Inventory

Component	CAS	US
Proprietary Component 1	Proprietary	Yes
Proprietary Component 2	Proprietary	Yes
Proprietary Component 3	Proprietary	Yes
Proprietary Component 4	Proprietary	Yes
Proprietary Component 5	Proprietary	Yes
Proprietary Component 6	Proprietary	Yes

International Regulation

Canadian WHMIS Class D, Division 2B

Section 16 – Other Information

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; C - Celsius; CAS - Chemical Abstracts Service; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NTP - National Toxicology Program; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; STEL - Short-term Exposure Limit; TWA - Time Weighted Average; UEL - Upper Explosive Limit

Other Information

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Summary of Changes

New SDS: 10/7/2010