1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

IDENTIFICATION OF THE MIXTURE
TRADE/MATERIAL NAME: MWS250 Marine Wrap Strip
RELEVANT USE of the SUBSTANCE: Firestop Device
USES ADVISED AGAINST: None
SUPPLIER/MANUFACTURER’S NAME (USA/Canada):
Address: Specified Technologies, Inc.
Business Phone: 210 Evans Way,
Emergency Phone: Somerville, New Jersey 08876
(908) 526-8000 (8:00am to 5:00pm Eastern Standard Time)
U.S., Canada: 1-800-255-3924 (24 hrs)
International: +1-813-248-0585 (Collect-24 hrs)
SUPPLIER/IMPORTER’S NAME (Asia):
Address:
Business Phone:
EMAIL of Competent Person for Information on SDS: techserv@stlmarine.com
NOTE: All United States Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, Canadian WHMIS [Controlled Products Regulations], Mexican NOM018-STPS 2000, SPRING Singapore, and Japanese JIS Z250 required information is included in appropriate sections based on the U.S. ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the countries listed above. This product is defined as an “Article” under the U.S. Federal OSHA Hazard Communication Standard (29 CFR 1910.1200), EU Directives, and the Canadian Workplace Hazardous Materials Standard. Refer to Section 15 (Regulatory Information) for specific regulatory citations. As articles, this product presents negligible health and physical hazards under reasonably anticipated circumstances of use. Subsequently, a Material Safety Data Sheet is not required under Standards cited above. This document is prepared to provide persons using this product with additional safety information.

2. HAZARD IDENTIFICATION

GLOBAL HARMONIZATION AND EU CLP REGULATION (EC) 1272/2008 LABELING AND CLASSIFICATION: This product is an article and is not required to be classified under CLP Regulation (EC) 1272/2008.
EU 67/548/EEC LABELING AND CLASSIFICATION: This product is an article and is not required to be classified under European Community Council Directive 67/548/EEC or subsequent Directives.
KOREAN ISHA (Notice 2009-68) LABELING AND CLASSIFICATION: As an article, this product is not subject to ISHA Notice 2009-68.

3. COMPOSITION and INFORMATION ON INGREDIENTS

This product is an article and as such no components of this product pose a hazard; no component information is given in this SDS.

4. FIRST-AID MEASURES

Skin Exposure: As an article, no need for first aid is anticipated.
Inhalation: As an article, no need for first aid is anticipated.
Eye Exposure: As an article, no need for first aid is anticipated.
Ingestion: As an article, no need for first aid is anticipated.

5. FIRE-FIGHTING MEASURES

FIRE EXTINGUISHING MEDIA: Use extinguishing materials suitable for the surrounding area.
UNSUITABLE FIRE EXTINGUISHING MEDIA: None known.
UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is formulated to be non-flammable and non-combustible.
SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS: No Special protective actions for fire-fighters are anticipated.
6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES: Not applicable.
PERSONAL PROTECTIVE EQUIPMENT: Not applicable.
METHODS FOR CLEAN-UP AND CONTAINMENT: Not applicable.
ENVIRONMENTAL PRECAUTIONS: Not applicable.

7. HANDLING and STORAGE

PRECAUTIONS FOR SAFE HANDLING: No special requirements.
CONDITIONS FOR SAFE STORAGE: No special requirements.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS: As an article which does not release or otherwise result in exposure to hazardous chemicals under normal use; no personal protective equipment (PPE) are required.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Solid.
COLOR: Black with Red Label.
available.
FLAMMABLE LIMITS (in air by volume, %): Not available.
ODOR: Not
DECOMPOSITION TEMPERATURE: Not available.
ODOR THRESHOLD: Not available.
AUTOIGNITION TEMPERATURE: Not available.
OXIDIZING PROPERTIES: Not applicable.
FREEZING/MELTING POINT: Not available.
PERCENT VOLATILE: 0
VAPOR PRESSURE: Not applicable.
FLASH POINT: Not available.
VAPOR DENSITY (air = 1): Not applicable.
BOILING POINT: Not applicable.
EVAPORATION RATE (n-BuAc = 1): Not applicable.
SPECIFIC GRAVITY (water = 1): Not applicable.
SOLUBILITY IN WATER: Insoluble.
CARB VOC: Not applicable.
COEFFICIENT WATER/OIL DISTRIBUTION: Not applicable.
SCAQMD (U.S. EPA Method 24): Not applicable.
PHT: Not applicable.

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: This product is stable when properly stored at normal temperatures.

11. TOXICOLOGICAL INFORMATION

SYMPTOMS OF EXPOSURE BY ROUTE OF EXPOSURE:

Inhalation: Due to the form of the product, inhalation is unlikely.

Contact with Skin or Eyes: Due to the form of the product, contact with the eyes is unlikely

Skin Absorption: Due to form of product, skin absorption is not a likely route of exposure.

Ingestion: Ingestion is not a likely route of exposure, due to the form of the product.

Injection: Injection is not likely, due to the form of the product.

12. ECOLOGICAL INFORMATION

MOBILITY: As an article, this product will not be mobile in soil.
PERSISTENCE AND BIODEGRADABILITY: No specific information is available regarding persistence and biodegradability.
BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential.
ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. All releases to terrestrial, atmospheric and aquatic environments should be avoided.
13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Waste disposal must be in accordance with appropriate Federal, State, and local regulations.
U.S. EPA WASTE NUMBER: Not applicable.

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.
TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.
INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is not classified as dangerous goods under rules of IATA.
INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is not classified as Dangerous Goods by the International Maritime Organization.
OFFICIAL MEXICAN STANDARD; REGULATION FOR THE TRANSPORT OF DANGEROUS GOODS AND RESIDUES: This product is not classified as Dangerous Goods, per transport regulations of Mexico.
SINGAPORE STANDARD 286: PART A: This product has no requirements under the Specification for Caution Labeling for Hazardous Substances, Part 4: Marking of Packages, Containers and Vehicles, as it does not meet the criteria for any hazard class under this regulation.
TRANSPORT IN BULK ACCORDING TO THE IBC CODE: See the information under the individual jurisdiction listings for IBC information.
ENVIRONMENTAL HAZARDS: This material does not meet the criteria of environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID, and ADN) and is not listed in Annex III under MARPOL 73/78.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA Reporting Requirements: As an article, this product is not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.
U.S. SARA Hazard Categories (Section 311/312, 40 CFR 370-21): ACUTE: No; CHRONIC: No; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No
U.S. SARA Threshold Planning Quantity (TPQ): As an article, this product is not subject to Threshold Planning Quantities, per 40 CFR 370.20.
U.S. CERCLA Reportable Quantity (RO): Not applicable
U.S. TSCA Inventory Status: Components of this product are listed on the TSCA Inventory.
California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): No component is on the California Proposition 65 lists.
CANADIAN REGULATIONS:
Canadian DSL/NDSL Inventory Status: Components are on the DSL or NDSL Inventories.
Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: Components are not on the CEPA Priorities Substances Lists.
Canadian WHMIS Classification and Symbols: As an article, this product is not subject the Controlled Product Regulations.
CHINESE REGULATIONS:
Chinese Inventory of Existing Chemical Substances Status: As an article, this product is not subject to requirements under the Chinese Inventory of Existing Chemical Substances (IECSC).
JAPANESE REGULATIONS:
Japanese ENCS: As an article, this product is not subject to requirements under ENCS Inventory.
Japanese Ministry of Economy, Trade, and Industry (METI) Status: As an article, this product is not subject to requirements under the Japanese METI.
Poisonous and Deleterious Substances Control Law: As an article, this product is not subject to requirements under the Poisonous and Deleterious Substances Control Law.
KOREAN REGULATIONS:
Korean Existing Chemicals List (ECL) Status: As an article, this product is not subject to requirements under the Korean ECL Inventory.
MEXICAN REGULATIONS:
Mexican Workplace Regulations (NOM-018-STPS-2000): This product is not classified as hazardous.
SINGAPORE REGULATIONS:
List of Controlled Hazardous Substances: As an article, this product is not subject to requirements under the Singapore List of Controlled Substances.
Code of Practice on Pollution Control Requirements: As an article, this product is not subject to requirements under the Singapore Code of Practice on Pollution Control.
TAIWANESE REGULATIONS:
Taiwan Existing Chemical Substances Inventory Status: As an article, this product is not subject to requirements under the Taiwan Existing Chemicals List.
16. OTHER INFORMATION

REVISION DETAILS: August 2015: Removal of specific component information.

REFERENCES AND DATA SOURCES: Contact the supplier for information.

METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION: Criteria of the GHS were used for classification.

PREPARED BY: CHEMICAL SAFETY ASSOCIATES, Inc. • PO Box 1961, Hilo, HI 96721-1961 • (800) 441-3365

DATE OF PRINTING: October 14, 2015

DEFINITION OF TERMS

A large number of abbreviations and acronyms appear on a SDS. Some of these, which are commonly used, include the following:

CAS #: This is the Chemical Abstract Service Number that uniquely identifies each constituent.

EXPOSURE LIMITS IN AIR:

CEILING LEVEL: The concentration that shall not be exceeded during any part of the working exposure.

PEL: Permissible Exposure Limit. An airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse health effects. It is not intended to be a ceiling for an 8-hour work day.

STEL: Short Term Exposure Limit; usually a 15-minute time-weighted average (TWA) exposure that should not be exceeded at any time during a workday, even if the 8-hour TWA is within the TLV.

TLV: Threshold Limit Value. An airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse health effects. It is not intended to be a ceiling for an 8-hour work day.

TWA: Time Weighted Average exposure concentration for a conventional 8-hour (T:PEL) or up to a 10-hour (REL) workday and a 40-hour workweek.

WEEL: Worker Exposure Evaluation Limit Levels from the AIHA.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) RATINGS:

This rating system was developed by the National Paint and Coating Association and has been adopted by industry to identify the degree of chemical hazards.

HEALTH HAZARD: 0 Minimal Hazard: No significant health risk, ignition of skin or eyes not anticipated. Skin irritation: Essentially non-irritating. Mechanical irritation may occur. P4 or Draize = 0. Eye irritation: Essentially non-irritating, minimal effects clearing in < 24 hours. Mechanical irritation may occur. P4 or Draize = 0. Inhalation: Essentially non-irritating. Inhalation toxicity of 4-hrs LC50 or > 20 mg/L. 1 Severe Hazard: Minor repeated irritation. Minor corneal irritation may irritate the stomach if swallowed; may defat the skin and exacerbate existing dermatitis. Skin irritation: Slightly or mildly irritating. P4 or Draize = 0 or 5. Eye irritation: Slightly to mildly irritating, but reversible within 7 days. Draize > 0 or 5. Inhalation Toxicity LC50 or > 20 mg/L. 2 Moderate Hazard: Temporary or transitory injury may occur; prolonged exposure may affect the CNS. Skin irritation: Moderately irritating; primary irritant; sensitizer. Draize > 5, with no destruction of dermal tissue. Eye irritation: Moderately to severely irritating; reversible corneal opacity; corneal irritation or irritation clearing in 8-21 days. Draize = 20-100, with reversible effects. Oral Toxicity LC50 or > 50-500 mg/L. Inhalation Toxicity LC50 or > 500 mg/L. 3 Severe Hazard: Major injury likely unless prompt action is taken and medical treatment is given; high level of toxicity. Corrosive: Severe irritation and/or corrosive; may cause destruction of dermal tissue. Corrosive: Severe irritation and/or corrosive; may cause destruction of dermal tissue. Skin irritation: Varies from slight irritation to severe damage to the tissue, possibly requiring heat or conflagration. Skin irritation: Severe to extreme; damage to skin tissue is possible. Eye irritation: Severe; permanent injury to the eye is possible. Inhalation Toxicity LC50 or < 15 min. Draize > 20. Inhalation Toxicity LC50 or > 10 mg/L. Inhalation Toxicity LC50 or > 10 mg/L. 4 Extreme Hazard: Major injury unless prompt action is taken and medical treatment is given; high level of toxicity. Corrosive: Severe irritation and/or corrosive; may cause destruction of dermal tissue. Corrosive: Severe irritation and/or corrosive; may cause destruction of dermal tissue. Skin irritation: Varies from slight irritation to severe damage to the tissue, possibly requiring heat or conflagration. Skin irritation: Severe to extreme; damage to skin tissue is possible. Eye irritation: Severe; permanent injury to the eye is possible. Inhalation Toxicity LC50 or < 15 min. Draize > 20. Inhalation Toxicity LC50 or > 10 mg/L. Inhalation Toxicity LC50 or > 10 mg/L.

FLAMMABILITY HAZARD: 0 Minimal Hazard: Materials that will not burn in air when exposure to a temperature of 50°C (122°F) for 60 min. Not a fire or flash hazard.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM HAZARD RATINGS (continued):

FLAMMABILITY HAZARD (continued): 1 Slight Hazard: Materials that must be pre-heated before ignition. Maximum heating temperatures prior to ignition may be 5°C (9°F) to 10°C (18°F) below the initial firepoint temperature. For substances that may burn in air at temperatures below 5°C (41°F), the maximum heating temperature is 5°C (9°F). Materials requiring heating temperature for ignition include all those having a fire point below 10°C (50°F)

2 Moderately Hazard: Materials that may be moderately heated or exposed to relatively high ambient temperatures before ignition may occur. Materials in this degree would not, under normal conditions, form hazardous atmospheres in air, but under high ambient temperatures or moderate heat release may be sufficient to produce hazardous atmospheres with air. This usually includes the following: Liquids having a flash point at or above 37.8°C (100°F). Solid materials in the form of coarse dusts that may burn rapidly but that generally do not form explosive atmospheres. 3 (continued): Solid materials in a flammable or shrouded form that may burn rapidly and create flash fire hazards (e.g. cotton, sisal, hemp); and Solids and semisolids (e.g. viscous and slow flowing as asphalt) that readily give off flammable vapors. 3 Severe Hazard: Liquids and solids that can ignite, and that do not produce explosive atmospheres. 4: (continued): Solid materials in a flammable or shrouded form that may burn rapidly and create flash fire hazards (e.g. cotton, sisal, hemp); and Solids and semisolids (e.g. viscous and slow flowing as asphalt) that readily give off flammable vapors. 3 Severe Hazard: Liquids and solids that can ignite, and that do not produce explosive atmospheres.
DEFINITION OF TERMS (Continued)

NATIONAL FIRE PROTECTION ASSOCIATION HAZARD RATINGS:

HEALTH HAZARD: 6 Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials. Gases and vapors with an LCI for acute inhalation toxicity greater than 10,000 ppm. Dusts and mists with an LCI for acute inhalation toxicity greater than 200 mg/mL. Materials with an LDI for acute oral toxicity greater than 2000 mg/kg. Materials essentially non-irritating to the respiratory tract, eyes, and skin. 6 Materials that, under emergency conditions, can cause significant irritation. Gases and vapors with an LCI for acute inhalation toxicity greater than 5000 ppm but less than or equal to 10,000 ppm. Dusts and mists with an LCI for acute inhalation toxicity greater than 10 mg/mL but less than or equal to 200 mg/mL. Materials with an LDI for acute dermal toxicity greater than 1000 mg/kg but less than or equal to 2000 mg/kg. Materials that slightly to moderately irritate the respiratory tract, eyes, and skin. Materials with an LDI for acute oral toxicity greater than 500 mg/kg but less than or equal to 2000 mg/kg. 2 Materials that, under emergency conditions, can cause temporary incapacitation or residual injury. Gases with an LCI for acute inhalation toxicity greater than 3000 ppm but less than or equal to 5000 ppm. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than one-fifth its LCI for acute inhalation toxicity, if its LCI is less than or equal to 5000 ppm and that does not meet the criteria for either degree of hazard 3 or degree of hazard 4. 4 Dusts and mists with an LCI for acute inhalation toxicity greater than 2 mg/mL, but less than or equal to 10 mg/mL. Materials with an LDI for acute dermal toxicity greater than 200 mg/kg but less than or equal to 1000 mg/kg. Compressed liquefied gases with boiling points below -50°C (-58°F) that cause severe tissue damage, depending on duration of exposure. Materials that are respiratory irritants. Materials that cause severe, but reversible irritation to the eyes or are lacrhythmators. Materials that are primary skin irritants or sensitizers. Materials whose LDIs for acute oral toxicity is greater than 50 mg/kg but less than or equal to 500 mg/kg. 3 Materials that, under emergency conditions, can cause serious or permanent injury. Gases with an LCI for acute inhalation toxicity greater than 1000 ppm but less than or equal to 3000 ppm. Any liquid whose saturated vapor concentration at 20°C (68°F) is equal to or greater than its LCI for acute inhalation toxicity, if its LCI is less than or equal to 3000 ppm and that does not meet the criteria for degree of hazard 4. 4 Dusts and mists with an LCI for acute inhalation toxicity greater than 0.5 mg/mL but less than or equal to 2 mg/mL. Materials with an LCI for acute dermal toxicity greater than 40 mg/kg but less than or equal to 200 mg/kg. Materials that are corrosive to the respiratory tract. Materials that are corrosive to the eyes or cause irreversible corneal opacity. Materials corrosive to the skin. CYTOGENIC GASES: Materials that cause explosive and irreversible tissue damage. Compressed liquefied gases with boiling points below -55°C (-67°F) that cause frostbite and irreversible tissue damage. Materials with an LDI for acute oral toxicity greater than 10 mg/kg but less than or equal to 50 mg/kg. 3 FLAMMABILITY HAZARD: 9 Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand. Materials that will not burn in air when exposed to a temperature of 816°C (1500°F) for a period of 5 minutes in accordance with Annex D of NFPA 704. 3 Materials that must be preheated before ignition can occur. Materials in this degree require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur. Materials that will burn in air when exposed to a temperature of 816°C (1500°F) for a period of 1 minute in accordance with Annex D of NFPA 704 and semisolids having a flash point at or above 93°C (200°F) (i.e. Class III-B liquids). Liquids with a flash point greater than 35°C (95°F) in a water-miscible solvent or dispersion with a water-noncombustible liquid/solid content of more than 85% by weight. Liquids that have no fire point when tested by ASTM D 92, Standard Test Method for Flash and Fire Points of Liquids by the Closed Cup Method, except for the boiling point to the top of a temperature at which the sample being tested shows an obvious physical change. Combustible pellets with a representative diameter of greater than 2 mm (10 mesh). Most ordinary combustible materials. Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. 2 Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur. Materials in this degree would not burn under conditions of hazardous atmospheric conditions with air, but under high ambient temperatures or under moderate heating could release vapor in sufficient quantities to produce hazardous atmospheres with air. Liquids having a flash point at or above 37.8°C (100°F) and below 60.0°C (140°F). 5 Class IIC materials in the form of solid material, i.e. dusts of representative diameter between 42 microns (40 mesh) and 2 mm (10 mesh) that burn rapidly and form explosive or incendiary mixtures with air. Solid material that burn rapidly and produce a flameless flash, such as hydrogen, methane, and propane. 3 Liquids and solids that can be ignited under almost all ambient temperature conditions. Materials in this degree produce hazardous atmospheres with air under almost all ambient temperatures and are not affected by temperature extremes. Materials inside explosive envelopes are rated in all conditions. Liquids having a flash point below 22.8°C (73°F) and having a boiling point at or above 37.8°C (100°F) and those liquids having a flash point at or above 22.8°C (73°F) and below 37.8°C (100°F) (i.e. Class IIA liquids). Materials that are liquid or gaseous materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and will burn readily. Flammable gases. Flammable cryogenic liquids. Any liquid or gaseous materials that is liquid while under pressure and has a flash point below 22.8°C (73°F) and a boiling point below 37.8°C (100°F) (i.e. Class IIA liquids). Materials that ignite when exposed to air. Solids containing greater than 0.5% by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent. 4 Materials that will rapidly or completely vaporize at atmospheric pressure and normal ambient temperature or that are readily dispersed in air and will burn readily. Flammable gases. Flammable cryogenic liquids. Any liquid or gaseous materials that is liquid while under pressure and has a flash point below 22.8°C (73°F) and a boiling point below 37.8°C (100°F) (i.e. Class IIA liquids). Materials that ignite when exposed to air. Solids containing greater than 0.5 percent by weight of a flammable or combustible solvent are rated by the closed cup flash point of the solvent.

INSTABILITY HAZARD: 0 Materials that in themselves are normally stable, even under fire conditions. Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) below 0.01 W/mL. Materials that do not exhibit an exotherm at temperatures less than or equal to 500°C (932°F) when tested by differential scanning calorimetry. 1 Materials that in themselves are normally stable, but that can become unstable at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 0.01 W/mL and below 10 W/mL. 2 Materials that readily undergo violent chemical change at elevated temperatures and pressures: Materials that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) at or above 10 W/mL and below 100 W/mL. Materials that are sensitive to thermal or mechanical shock at elevated temperatures and pressures. 4 Materials that in themselves are readily capable of detonation or explosive decomposition or explosive reaction at normal temperatures and pressures that have an estimated instantaneous power density (product of heat of reaction and reaction rate) at 250°C (482°F) of 1000 W/mL or greater. Materials that are sensitive to localized thermal or mechanical shock at normal temperatures and pressures.

FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). Flash Point: Minimum temperature at which a liquid gives off sufficient vapor to form an ignitable mixture with air near the surface of the liquid or the liquid is a test vessel used. Autoignition Temperature: Minimum temperature of a solid, liquid, or gas required to initiate or cause self-sustained combustion in air with no other source of ignition. LEI: Lowest concentration of a flammable vapor or flammable liquid that will ignite in air with a flame. LEH: Lowest concentration of a flammable vapor or gas/air mixture that will ignite and burn with a flame.

TOXICOLOGICAL INFORMATION:

Human and Animal Toxicology: Possible health hazards as derived from human data, animal studies, and results of standard tests. Components are presented. LD50: Lethal Dose (solids and liquids) that kills 50% of the exposed animals. LC50: Lethal Concentration (gases) that kills 50% of the exposed animals. ppm: Concentration expressed in parts of material per million parts of air or water. 1 ppm in weight equals 1 part per million volume of air. Quantity of material, by weight, administered to a test subject, based on their body weight in kg. TLC: Lowest dose to cause a symptom. TLC: Lowest concentration to cause a symptom. TLD: TLD, TD50, TD50, and TD0: TLD, LC50, and LD50: Lowest dose (or concentration) to cause lethal or toxic effects. Cancer Information: IARC: International Agency for Research on Cancer. NTP: National Toxicology Program. DTSC: Registry of Toxic Effects of Chemical Substances. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrangings (2A, 2B, etc.) are also used. Other Information: BIA: ACGIH Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as workers exposed to the TLV.

ECOLOGICAL INFORMATION:

EC: Effect concentration in water. BCF: Bioconcentration Factor, which is used to determine if a substance will concentrate in life forms that consume contaminated plant or animal matter. Tm: Median threshold level, Log K of log p: Coefficient of Oil/Water Distribution is used to assess a substance’s behavior in the environment.

REGULATORY INFORMATION:

U.S.A.: EPA. U.S. Environmental Protection Agency. ACGIH: American Conference of Governmental Industrial Hygienists, a professional association that establishes exposure limits. OSHA: U.S. Occupational Safety and Health Administration. NIOSH: National Institute of Occupational Safety and Health, which is the research arm of OSHA. DOT: U.S. Department of Transportation. SARA: Superfund Amendments and Reauthorization Act. TSCA: U.S. Toxic Substance Control Act. CARB: California Air Resources Board. EN: Environmental Response, Compensation, and Liability Act. Marine Pollutant status according to the DOT; CERCLA or Superfund; and various state regulations. This section also includes information on the precautionary warnings that appear on the material’s packaging label.

CANADA:


JAPAN:

METI: Ministry of Economy, Trade and Industry.