SAFETY DATA SHEET (SDS)

hemochroma PLUS®
Microcuvettes

SDS №: HCP002

Reviewed & Revised: 2/22/2019
Created: 02/2019

Complies with OSHA's Hazard Communication Standard, 29 CFR 1910.1200; and the Globally Harmonized System of Classification and Labeling of Chemicals.

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME:	hemochroma PLUS® Microcuvettes	SERIES NAME:	hemochroma PLUS®
CATALOGUE №.:	100-202		
INTENDED USE:	The hemochroma PLUS® System is for the quantitative determination of hemoglobin concentration in non-anticoagulated capillary (finger-stick) whole blood or venous whole blood (K2-EDTA, K3-EDTA, sodium citrate, lithium heparin, or sodium heparin). The testing system is designed for point-of-care settings, hospitals, and medical lab facilities.		
PRODUCT USE:	For In Vitro Diagnostic Use. See product literature for details.	EMERGENCY:	+1 (800) 424-9300 (CHEMTREC)
DISTRIBUTOR:	Immunostics, Inc.	POISON CONTROL:	1-800-876-4766 (USA only)/ 1-800-672-1697
ADDRESS:	38 Industrial Way East, Ste. 1	WEBSITE:	www.Immunostics.com
CITY, STATE, ZIP	Eatontown, New Jersey 07724	EMAIL:	Technical@Immunostics.com
TELEPHONE:	+1 (732) 918-0770	FAX:	+1 (732) 918-0618
DATE PREPARED:	02/22/2019		

SECTION 2: HAZARD IDENTIFICATION

GHS CLASSIFICATION	SIGNAL WORD	SYMBOL	HAZARD & PRECAUTIONARY STATEMENTS
Not Hazardous	N/A	N/A	N/A

Emergency Overview: This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients. Product has little to no hazards for Emergency Responders if spilled and has no unusual hazard if in a fire. While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Significant health effects are NOT anticipated from routine use when adhering to the instructions listed in the Package Insert provided with kit.
Human serum products and patient specimens should be considered potentially hazardous and handled in the same manner as an infectious agent. Follow Universal Precautions as necessary.

SECTION 3: COMPOSITION

CHEMICAL NAME	IUPAC	SYNONYMS	COMPOSITION	IDENTIFIERS	
Poly(methyl methacrylate) Molecular Formula: $(C_5O_2H_8)_n$	Poly(methyl 2-methylpropenoate)	Poly(methyl methacrylate) (PMMA) methyl methacrylate resin perspex	98.0%	CAS PUBCHEM EC UN RTECS	9011-14-7 N/A N/A N/A N/A
Polysorbate 20 Molecular Formula: $(C_{26}H_{50}O_{10})$	Polyoxyethylene (20) sorbitan monolaurate	Montanox 20 Polysorbate 20 PEG(20)sorbitan monolaurate Alkest TW 20 Tween 20	0.05%	CAS PUBCHEM EC UN RTECS	9005-64-5 443314 N/A N/A TR7400000
Sodium Azide Molecular Formula: NaN_3	Sodium Azide	Sodium trinitride; Smite; Azium; Sodium azoimide	< 0.05%	CAS PUBCHEM EC UN RTECS	26628-22-8 33557 247-852-1 1687 VY8050000

No dangerous solid or liquid substances present in >1% (or as required by applicable U.S., Canadian and E.U. regulations): No hazardous components in excess of 1% are contained in this kit.

SECTION 4: FIRST AID MEASURES

EYES: In case of contact with eyes, immediately wash eyes under potable running water for at least 15 minutes, making sure that the eyelids are held open. If pain or irritation occurs, obtain medical attention.

SKIN: In case of contact to the skin, remove any contaminated clothing and wash affected area with plenty of soap and water. If pain, irritation, or other symptoms develop, obtain medical attention.

INGESTION: In case of ingestion, contact a poison control center or physician for instructions. Only induce vomiting if directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

INHALATION: Inhalation of any component in this kit is unlikely. If a component of this kit is inhaled and causes discomfort, move exposed individual to fresh air. Seek medical attention if breathing is difficult or symptoms persist. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance.

SYMPTOMS: To the best of our knowledge, no symptoms, acute or delayed, have been reported.

SECTION 5: FIRE FIGHTING & EXPLOSION HAZARDS

Flash Point: Non Combustible

Auto-ignition Temperature: Not Applicable

Upper / Lower Explosion Limit: Not Applicable

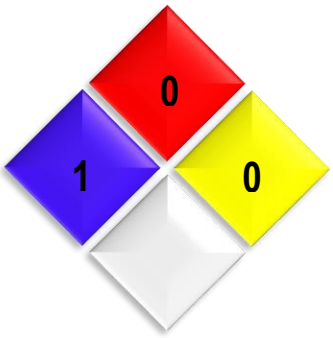
Extinguishing Media: For small fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray

Special Fire Fighting Procedures: This material will not significantly contribute to the intensity of a fire. Use extinguishing material suitable to the surrounding fire. Utilize proper personal protective equipment when responding to any fire. Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment.

Special Exposure Hazards: None Identified

Only trained and competent personnel shall attempt to extinguish a fire. Contact emergency response personnel as required. Be cautious of surrounding materials that may react with the extinguishing media.

NFPA Ratings:



	FLAMMABILITY	REACTIVITY	SPECIAL	HEALTH
0	Will not burn (e.g., argon)	Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium)	The white "special notice" area can contain several symbols. The following symbols are defined by the NFPA 704 standard.	Poses no health hazard, no precautions necessary (e.g., water)
1	Must be heated before ignition can occur (e.g., mineral oil). Flash point over 93°C (200°F)	Normally stable, but can become unstable at elevated temperatures and pressures (e.g. propene)		Exposure would cause irritation with only minor residual injury (e.g., acetone)
2	Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur (e.g., diesel fuel). Flash point between 38°C (100°F) and 93°C (200°F)	Undergoes violent chemical change at elevated temperatures and pressures, reacts violently with water, or may form explosive mixtures with water (e.g., phosphorus, potassium, sodium)	OX Oxidizer (e.g., potassium perchlorate, ammonium nitrate, hydrogen peroxide)	Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g., ethyl ether)
3	Liquids and solids that can be ignited under almost all ambient temperature conditions (e.g., gasoline). Liquids having a Flash point below 23°C (73°F) and having a Boiling point at or above 38°C (100°F) or having a Flash point between 23°C (73°F) and 38°C (100°F)	Capable of detonation or explosive decomposition but requires a strong initiating source, must be heated under confinement before initiation, reacts explosively with water, or will detonate if severely shocked (e.g. ammonium nitrate)	W Reacts with water in an unusual or dangerous manner (e.g., cesium, sodium, sulfuric acid)	Short exposure could cause serious temporary or moderate residual injury (e.g., chlorine gas)
4	Will rapidly or completely vaporize at normal atmospheric pressure and temperature, or is readily dispersed in air and will burn readily (e.g., propane, hydrogen). Flash point below 23°C (73°F)	Readily capable of detonation or explosive decomposition at normal temperatures and pressures (e.g., nitroglycerine, Trinitrotoluene)		Very short exposure could cause death or major residual injury (e.g., hydrogen cyanide, phosphine, carbon monoxide)

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use Personal Protective Equipment at all times while handling. Use good laboratory procedures; avoid eye and skin contact.

Environmental Precautions: No environmental hazard is anticipated provided that the material is handled and disposed of with due care.

Spill and Leak Procedures: Large spills of this kit are unlikely. Utilize safety glasses, nitrile gloves, and lab coat/apron when responding to spills involving the components of this kit. Absorb liquid with an appropriate inert, non-flammable absorbent and place in container suitable for disposal. Dispose of in accordance with applicable U.S. Federal, State, or local procedures or appropriate standards of Canada or the EU (see Section 13, Disposal Considerations).

SECTION 7: HANDLING & STORAGE

Handling: As with all chemicals, avoid getting components within this kit ON YOU or IN YOU. Wash exposed areas thoroughly after using this kit. Do not eat or drink while using this kit. This kit should be handled only by qualified clinical or laboratory personnel trained on the use of this kit. This kit should be handled as though capable of transmitting infectious diseases. Universal Precautions should be followed when using this kit. **Not for use by the general public**.

Storage: Keep away from incompatible materials (Section 10). To maintain efficacy, when not in use, keep components tightly closed and store according to the package insert instructions.

Specific Use: **For in vitro diagnostic use only**.

Other: Do not substitute components from this kit with other manufacturers. The components in each kit are matched.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

	OSHA PEL	ACGIH TLV	DFG MAK	NIOSH
Sodium Azide EU Index: 011-004-00-7 EU Classification: Highly toxic (T+) Very dangerous for the environment (N)	none listed	0.29 mg/m^3 Ceiling (sodium azide); 0.11 ppm Ceiling (hydrazoic acid, vapor)	0.2 mg/m^3 MAK (inhalable fraction)	0.3 mg/m^3 Ceiling (sodium azide); 0.1 ppm Ceiling (hydrazoic acid, vapor)

Occupational Exposure Controls:

Engineering Controls: No special engineering controls are required when working with this kit. Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above.

Personal Protective Equipment (PPE):

Respiratory Protection: Under normal conditions, the use of this product should not require respiratory protection.

Eye Contact: Safety glasses or chemical goggles should be worn to prevent eye contact. Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate government standards.

Skin Contact: Wear Impervious gloves, such as latex or equivalent, should be worn to prevent skin contact and especially cover any cuts, abrasions or skin lesions. Dispose of gloves as bio-hazardous material. Wash hands thoroughly after removing gloves. Use extreme caution with any sharp object to avoid percutaneous exposure to material. Wear outer protective garments such as a lab coat or gown. Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate government standards.

Other: Not Applicable

Environmental Controls: No special environmental controls are required.

SECTION 9: PHYSICAL & CHEMICAL CHARACTERISTICS

Characteristic	hemochroma PLUS® Microcuvettes
Appearance	Clear
Odor	Not Available
pH	Not Available
Boiling Point	200°C
Melting Point	165°C
Specific Gravity	1.18
Flash Point	>280°C
Vapor Density	Not Available
Solubility in Water	Soluble
Evaporation Rate	Not Available
Auto-ignition Temperature	Not Available
Decomposition Temperature	Not Available
Viscosity	Not Available

SECTION 10: STABILITY AND REACTIVITY

Characteristic	hemochroma PLUS® Microcuvettes
Stability:	Stable when stored according to approved labeling (see Section 7).
Conditions to Avoid:	Protect from prolonged exposure to heat, ignition sources & incompatible materials.
Materials to Avoid (Incompatibility):	No Data Available
Hazardous Decomposition or Byproducts:	None, when stored as recommended. Under Fire conditions: Irritation or toxic gases may form. Inhalation of such may be harmful.
Hazardous Reactions:	NONE EXPECTED

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicity Data for Hazardous Ingredients:	There are currently no toxicity data available for the components of this kit.
Routes of Exposure:	**Overexposures to components within this kit are not expected.** Common routes of exposure may include ingestion and eye/skin contact. Specific paths of concern for potentially infectious materials are skin puncture, contact with broken skin, contact with mucous membranes and inhalation of aerosolized material.
Potential Effects of Acute Overexposure, By Route Of Exposure:	**Overexposures to components within this kit are not expected.**
INHALATION:	No Data Available
CONTACT WITH SKIN or EYES:	No Data Available
SKIN ABSORPTION:	No Data Available
INGESTION:	No Data Available
INJECTION:	No Data Available
Potential Effects of Chronic Exposure:	Long-term skin or eye contact can result in dermatitis or eye irritation. Prolonged or repetitive exposure to Sodium Azide may increase risk of cumulative effects.
Symptoms of Overexposure:	Symptoms of overexposure to Sodium Azide may include: eye, skin, nose, and throat irritation, headache, nausea and vomiting. Symptoms may be delayed for several hours after exposure. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Medical Conditions Aggravated by Exposure:	Persons with pre-existing skin disorders; eye problems or impaired respiratory system function can be more susceptible to health effects associated with overexposures to the chemicals within this kit.
Irritation/Sensitization	May cause sensitization by inhalation and skin contact.
Other Effects	None identified.
Carcinogenicity	No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, OSHA or GHS

SECTION 12: ECOLOGICAL INFORMATION

Eco-toxicity	No adverse effects on the environment are expected from the components of this kit.
Persistence and Degradability, Mobility & Bioaccumulation	Data are not available for the components of this kit.

There is limited potential for the components within this kit to accumulate in plant or animal systems.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:	Dispose of waste materials, unused components and contaminated packaging in compliance with country (i.e., Canada, EU) federal, state and local regulations. If unsure of the applicable requirements, contact the authorities for information.
WITH SPECIMEN:	Patient specimens and all materials coming into contact with them should be handled as if capable of transmitting infections and disposed of with proper precautions.

SECTION 14: TRANSPORT INFORMATION

U.S. Transportation

This substance is considered to be non-hazardous for transport.

Canadian Transportation

The above-listed DOT basic description applies to this product under the regulations of Transport Canada.

International Air Transportation

This substance is considered to be non-hazardous for air transport.

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL AND STATE REGULATIONS

U.S. SARA SECTION 311/312 FOR KIT:	Not applicable
U.S. TSCA INVENTORY STATUS:	Sodium Azide listed on the TSCA Inventory.
OTHER U.S. FEDERAL REGULATIONS:	Not applicable
CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):	NO INGREDIENTS LISTED

CANADIAN REGULATIONS:

CANADIAN DSL/NDSL INVENTORY STATUS: Sodium Azide is listed on the DSL Inventory.

CANADIAN WHMIS SYMBOLS: None Required

HMIS RATINGS

Health	**1**
Flammability	**0**
Physical Hazard	**0**
Protective Equipment	**B**

B: Safety Glasses and Gloves

EU LABELING CLASSIFICATION

Classification: Non-Hazardous-No hazard classification or danger symbol required.

Risk Phrases: N/A
Safety Phrases: N/A

SECTION 16: OTHER INFORMATION

Revision Date: February 22, 2019

SDS Initial release.

This SDS has been prepared in accordance with ANSI Z400.1 format. Every effort has been made to adhere to the hazard criteria and content requirements of the US OSHA Hazard Communication Standard, European Communities Safety Data Sheets Directive, Canadian Controlled Products Regulations, UK Chemical Hazard information and Packaging Regulations, and UN Globally Harmonized System of Classification and Labeling of Chemicals.

The hazard ratings on this SDS are for appropriately trained workers using the Hazardous Materials Identification System (HMIS®) or a National Fire Protection Association (NFPA) 704 Program. The ratings are estimates and should be treated as such. The hazard rating scales range from (0) minimal hazards to (4) significant hazards or risks (Refer to Definitions of Terms at the end of this SDS). Chronic (long-term) health effects are indicated in the HMIS by and asterisk (*). HMIS is a registered trade and service mark of the NPCA. For details on HMIS ratings visit www.paint.org/hmis. For details on NFPA 704 visit www.nfpa.org.

DISCLAIMER:

The information provided in this Safety Data Sheet has been compiled, in good faith, from our experience and data presented in various technical publications and believed to be accurate and represents the best information currently available to us. An SDS for a substance is not primarily intended for use by the general consumer, focusing instead on the hazards of working with the material in an occupational setting. However, we make no warranty of merchantability, fitness for a particular purpose or of any other type, expressed or implied, with respect to products described or data or information provided, and we assume no liability resulting from the use of such products, data or information. Users should make their own investigations to determine the suitability of the information for their particular purposes, and the user assumes all risk arising from their use of the material. The user is required to comply with all laws and regulations relating to the purchase, use, storage and disposal of the material, and must be familiar with and follow generally accepted safe handling procedures. Immunostics, Inc. shall not be held liable for any claims, losses, or damages of any individual or for post profits of any special, indirect, incidental, consequential or exemplary damages, resulting from handling or from contact with the product described in this SDS even if Immunostics, Inc. has been advised of the possibility of such damages. We reserve the right to update SDS sheets from time to time as new information becomes available. It is the responsibility of the user to verify that they have the latest revision available.

NFPA 704

CHEMTREC® (24 hours) **1-800-424-9300** (Toll-free in the U.S., Canada, and the U.S. Virgin Islands) For calls originating elsewhere: **703-527-3887** (Collect calls are accepted)	**CHEMTEL, INC.** (24 hours) **1-888-255-3924** (Toll-free in the U.S., Canada, Puerto Rico and the U.S. Virgin Islands) For calls originating elsewhere: **813-248-0585** (Collect calls are accepted)
INFOTRAC (24 hours) **1-800-535-5053** (Toll-free in the U.S., Canada, and the U.S. Virgin Islands) For calls originating elsewhere: **352-323-3500** (Collect calls are accepted)	**3E COMPANY** (24 hours) **1-800-451-8346** (Toll-free in the U.S., Canada, and the U.S. Virgin Islands) For calls originating elsewhere: **760-602-8703** (Collect calls are accepted)

The emergency response information services shown above have requested to be listed as providers of emergency response information and have agreed to provide emergency response information to all callers. They maintain periodically updated lists of state and Federal radiation authorities who provide information and technical assistance on handling incidents involving radioactive materials.

NATIONWIDE POISON CONTROL CENTER (United States Only)
Emergency and information calls are answered by the nearest Poison Center (24 hours): **1-800-222-1222** (toll-free in the U.S.).

NATIONAL RESPONSE CENTER (NRC)
The NRC, which is operated by the U.S. Coast Guard, receives reports required when dangerous goods and hazardous substances are spilled. After receiving notification of an incident, the NRC will immediately notify the appropriate Federal On-Scene Coordinator and concerned Federal agencies. Federal law requires that anyone who releases into the environment a reportable quantity of a hazardous substance (including oil when water is, or may be affected) or a material identified as a marine pollutant must **immediately** notify the NRC. When in doubt as to whether the amount released equals the required reporting levels for these materials, the NRC should be notified.

CALL **NRC** (24 hours) **1-800-424-8802** (Toll-free in the U.S., Canada, and the U.S. Virgin Islands)
202-267-2675 in the District of Columbia

Calling the emergency response telephone number, CHEMTREC®, CHEMTEL, INC., INFOTRAC or 3E COMPANY, does not constitute compliance with regulatory requirements to call the NRC.

DEFINITIONS OF TERMS

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

CAS (Chemical Abstract Service) Number that uniquely identifies each compound.

ACGIH (American Conference of Governmental Industrial Hygienists): a professional association that establishes exposure limits.

TLV (Threshold Limit Value): an airborne concentration of a substance that represents conditions under which it is generally believed that nearly all workers can be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (**TWA**), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level (C). Skin absorption effects must also be considered.

OSHA (U.S. Occupational Safety and Health Administration)

PEL (Permissible Exposure Limit): This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL that was vacated by Court Order.

IDLH (Immediately Dangerous to Life and Health): This level represents a concentration from which one can escape within 30- minutes without suffering escape-preventing or permanent injury.

DFG-MAK is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. NIOSH is the National Institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA).

NIOSH issues exposure guidelines called Recommended Exposure Levels (RELs). When no exposure guidelines are established, an entry of NE is made for reference.

Protective Equipment

A: Safety Glasses.
B: Safety glasses and gloves.
C: Safety glasses, gloves and body protection.
D: Splash goggles with face shield, gloves and body protection.
E: Eye protection, gloves and dust mask respiratory protection.
F: Eye protection, gloves, body protection and dust mask respiratory protection.
G: Eye protection, gloves and air purifying respiratory protection.

HAZARD RATINGS:

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (**HMIS**):

Health Hazard: **0** (minimal acute or chronic exposure hazard); **1** (slight acute or chronic exposure hazard); **2** (moderate acute or significant chronic exposure hazard); **3** (severe acute exposure hazard; onetime overexposure can cause permanent injury and can be fatal); **4** (extreme acute exposure hazard; single overexposure can be fatal). * Indicates chronic hazard.

Flammability Hazard: **0** (minimal hazard); **1** (materials that require substantial pre-heating before burning); **2** (combustible liquid or solids; liquids with a flash point of 38-93°C [100-200°F]); **3** (Class IB and IC flammable liquids with flash points below 38°C [100° F]); **4** (Class IA flammable liquids with flash points below 23°C [73°F] and boiling points below 38°C [100°F].

Reactivity Hazard: **0** (normally stable); **1** (material that can become unstable at elevated temperatures or which can react slightly with water); **2** (materials that are unstable but do not detonate or which can react violently with water); **3** (materials that can detonate when initiated or which can react explosively with water); **4** (materials that can detonate at normal temperatures or pressures).

NATIONAL FIRE PROTECTION ASSOCIATION (**NFPA**):

Health Hazard: **0** (material that on exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials); **1** (materials that on exposure under fire conditions could cause irritation or minor residual injury); **2** (materials that on intense or continued exposure under fire conditions could cause temporary incapacitation or possible residual injury); **3** (materials that can on short exposure could cause serious temporary or residual injury); **4** (materials that under very short exposure could cause death or major residual injury).

Flammability Hazard and Reactivity Hazard: Refer to definitions for "Hazardous Materials Identification System".

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 vapors to form an ignitable mixture with air. Autoignition Temperature: The minimum temperature required to initiate combustion in air with no other source of ignition. LEL - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. UEL - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

TOXICOLOGICAL INFORMATION:

Possible health hazards as derived from human data, animal studies, or from the results of studies with similar compounds are presented. Definitions of some terms used in this section are: LD50 - Lethal Dose (solids & liquids) which kills 50% of the exposed animals; LC50 - Lethal Concentration (gases) which kills 50% of the exposed animals; ppm concentration expressed in parts of material per million parts of air or water; mg/m3 concentration expressed in weight of substance per volume of air; mg/kg quantity of material, by weight, administered to a test subject, based on their body weight in kg. Other measures of toxicity include TDLo, the lowest dose to cause a symptom and TCLo the lowest concentration to cause a symptom; TDo, LDLo, LDo, TC, TCo, LCLo, and LCo, the lowest dose (or concentration) to cause lethal or toxic effects. BEI - Biological Exposure Indices, represent the levels of determinants that are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the TLV. Ecological Information: EC is the effect concentration in water.

Data from several sources are used to evaluate the cancer-causing potential of the material. The sources and ratings are: IARC - the International Agency for Research on Cancer; 1 = Carcinogenic to humans, 2A, 2B = Probably carcinogenic to humans, 3 = Unclassifiable as to carcinogenicity in humans, and 4 = Probably not carcinogenic to humans. NTP - the National Toxicology Program; K =Known to be a human carcinogen, and R = Reasonably anticipated to be a human carcinogen. RTECS - the Registry of Toxic Effects of Chemical Substances. OSHA - Occupational Safety and Health Administration and CAL/OSHA - California's subunit of the Occupational Safety and Health Administration; Ca = Carcinogen defined with no further categorization. ACGIH – American Conference of Governmental Industrial Hygienists; A1 = Confirmed human carcinogen, A2 = Suspected human carcinogen, A3 = Confirmed animal carcinogen with unknown relevance to humans, A4 = Not classifiable as a human carcinogen, and A5 = Not suspected as a human carcinogen. NIOSH – U.S. National Institute for Occupational Safety and Health; Ca = Potential occupational carcinogen, with no further categorization. EPA – U.S. Environmental Protection Agency; A = Human carcinogen, B = Probable human carcinogen, C = Possible human carcinogen, D = Not classifiable as to human carcinogenicity, E = Evidence of Non-carcinogenicity for humans, K = Known human carcinogen, L = Likely to produce cancer in humans, CBD = Cannot be determined, NL = Not likely to be carcinogenic in humans, and I = Data are inadequate for an assessment of human carcinogenic potential.

REGULATORY INFORMATION:

This section explains the impact of various laws and regulations on the material. EPA is the U.S. Environmental Protection Agency. **WHMIS** is the Canadian Workplace Hazardous Materials Information System. **DOT** and **TC** are the U.S. Department of Transportation and the Transport Canada, respectively.

Superfund Amendments and Reauthorization Act (**SARA**); the Canadian Domestic/Non-Domestic Substances List (**DSL/NDSL**); the U.S. Toxic Substance Control Act (**TSCA**); Marine Pollutant status according to the DOT; the Comprehensive Environmental Response, Compensation, and Liability Act (**CERCLA** or Superfund); and various state regulations.

This section also includes information on the precautionary warnings that appear on a material's industrial package label.