

## SAFETY DATA SHEET

# SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

## 1.1 Product identifier

TRADE NAME (AS LABELED): ClearSol CIP Complete 20+ CHEMICAL NAME/CLASS: Chelated Caustic Concentrate

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

PRODUCT USE: Cleaning composition

USES ADVISED AGAINST: None known

## 1.3 Details of the supplier of the safety data sheet

SUPPLIER/MANUFACTURER'S NAME: Clear Solutions USA ADDRESS: 47 North Ski Court Gilbert, AZ 85233

## 1.4 Emergency telephone number

EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)

BUSINESS PHONE: 480-539-4276

## SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

SERIOUS EYE DAMAGE: Category 1
SKIN IRRITATION: Category 1B
TARGET ORGAN TOXICITY (SINGLE EXPOSURE): Category 1
AQUATIC ENVIRONMENT – ACUTE HAZARD: Category 3

## 2.2 Label elements

## **Pictogram**





Signal Word Danger

#### **Hazard Statements**

H318: Causes serious eye damage.

H314: Causes severe skin burns and eye damage.

H370: Causes damage to organs (Respiratory System, Gastrointestinal System)

## **Precautionary Statements**

P280: Wear eye protection / face protection. P264: Wash thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P260: Do not breathe mist, vapors, or spray

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor / physician if you feel unwell.

P301 + P330 + P331: IF SWALLOWED: Rinse mouth. Do not induce vomiting.

262: Do not get on eyes, on skin, or on clothing.

P303 + P361 + P353: IF ON SKIN (or hair): Remove take off immediately all contaminated clothing. Rinse skin

with water/shower.

P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing

P310: Immediately call a POISON CENTER or doctor / physician.

#### Other Hazards

Slightly irritating to the respiratory tract.

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL NAME	CAS#	% w/w	EXPOSURE LIMITS IN AIR					
			ACGIH-TLV		OSHA-PEL			OTHER
			TWA	STEL	TWA	STEL	IDLH	
			mg/m³	mg/m³	mg/m³	mg/m <sup>3</sup>	mg/m <sup>3</sup>	mg/m³
Sodium Hydroxide	1310-73-2	30 - 95						
Gluconic Acid	526-95-4	1 - 10	NE	NE	NE	NE	NE	NE
Amino tris(methylene phosphonic acid)	6419-19-8	1 - 10	NE	NE	NE	NE	NE	NE
Phosphoric Acid	7664-38-2	< 1	1 ppm	3 ppm	1 ppm	3 ppm	NE	NE
Proprietary Mixture	Proprietary	< 5	NE	NE	NE	NE	NE	NE
Water	7732-18-5	To q.s.	NE	NE	NE	NE	NE	NE

NE = Not Established.

NOTE: The chemical identity and/or exact percentage (concentration) of the composition has been withheld as a trade secret.

#### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

<u>SKIN CONTACT</u>: If spilled on skin, begin decontamination with copious amounts of running water and soap. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Continue washing/flushing of skin for at least 5 minutes.

<u>EYE CONTACT</u>: If the product is splashed in eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelids. Have the contaminated individual "roll" eyes. The recommended minimum flushing time is 15 minutes. If any adverse effect occurs, seek immediate medical attention.

<u>INHALATION</u>: If aerosols or mists of this product are inhaled, remove victim to fresh air. If adverse effect occurs, seek medical assistance.

<u>INGESTION</u>: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Rinse mouth with water immediately, if conscious. If conscious, have victim rinse mouth with water or give several cupfuls of water. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain an open airway and prevent aspiration. If contaminated individual is convulsing, maintain an open airway and obtain immediate medical attention.

<u>PROTECTION OF FIRST-AIDERS</u>: Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

#### 4.2 Most important symptoms and effects, both acute and delayed

NO INFORMATION AVAILABLE

## 4.3 Indication of any immediate medical attention and special treatment needed

NOTE TO PHYSICIAN: Treat symptomatically

## **SECTION 5: FIRE-FIGHTING MEASURES**

#### 5.1 Extinguishing Media

SUITABLE EXTINGUISING MEDIA:

Water Spray: YES
Foam: YES
Dry Chemical: YES
Halon: YES
Other: Any "ABC" Class.

EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS: None known.

#### 5.2 Special hazards arising from the substance or mixture

<u>HAZARDOUS COMBUSTION PROUCTS</u>: This product is combustible and must be moderately to severely preheated for ignition to occur. When involved in a fire, this material may decompose and produce caustic vapors and toxic gases (e.g., oxides of carbon, oxides of nitrogen and oxides of sulfur).

#### 5.3 Advice for firefighters

Prevent the spread of any released product to source of ignition. Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move fire-exposed containers of this product out of area, if it can be done without risk to firefighters. If this product is involved in a fire, fire runoff water should be contained to prevent possible environmental damage.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment.

#### 6.2 Environmental precautions

Product should not be released into the environment.

## 6.1 Methods and material for containment and cleaning up

Collect spillage and collect in suitable container for disposal.

#### 6.1 Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

#### SECTION 7. HANDLING and STORAGE

## 7.1 Precautions for safe handling

As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing vapors or mists generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

## 7.2 Conditions for safe storage, including any incompatibilities

All employees who handle this material should be trained to handle it safely. Open containers slowly on a stable surface. Containers of this product must be properly labeled. Do not store above temperatures of 93°C (200°F). Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Store away from incompatible materials (see Section 10, Stability and Reactivity). Material should be stored in secondary containers or in a diked area, as appropriate. Keep container tightly closed when not in use. Inspect all incoming containers before storage to ensure containers are properly labeled and not damaged.

For Non-Bulk Containers: Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). When using this product, open valves on pipelines and other production equipment that contains this product slowly. Periodically inspect totes or tanks of this product for leaks or damage. Perform routine maintenance on all process equipment. Storage areas should be made of corrosion resistant materials. Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers may contain residual liquid or vapors; therefore, empty containers should be handled with care. Never store food, feed, or drinking water in containers that held this product.

**Bulk Containers:** All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks promptly.

Tank Car Shipments: Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level and wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tank (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be clean and free of incompatible chemicals, prior to connection to the tank car or vessel. Valves and hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

#### 7.3 Specific end use(s)

Use in industrial applications.

## **SECTION 8. EXPOSURE CONTROLS - PERSONAL PROTECTION**

#### 8.1 Control parameters

EXPOSURE LIMITS: See Section 3.

## 8.2 Exposure controls

<u>VENTILATION AND ENGINEERING CONTROLS</u>: Use with adequate ventilation. If necessary, vent material to outside, taking appropriate precautions to prevent environmental contamination. Ensure eyewash/safety shower stations are available near where this product is used.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below exposure limits listed in Section 2 (Composition and Information on Ingredients). If respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under OSHA's Respiratory Protection Standard (1910.134-1998).

EYE PROTECTION: Splash goggles or safety glasses.

<u>HAND PROTECTION</u>: Wear neoprene or vinyl gloves for routine industrial use. Use triple gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this MSDS.

<u>BODY PROTECTION</u>: Use body protection appropriate for task. An apron or other impermeable body protection is suggested. Full-body chemical protective clothing is recommended for emergency response procedures.

## **SECTION 9. PHYSICAL and CHEMICAL PROPERTIES**

## 9.1 Information on basic physical and chemical properties

RELATIVE VAPOR DENSITY (air = 1): Not established. EVAPORATION RATE (n-BuAc = 1): Not determined.

<u>SPECIFIC GRAVITY (water = 1)</u>: 1.49 <u>MELTING POINT</u>: Not determined. SOLUBILITY IN WATER: Soluble. BOILING POINT: Not determined.

VAPOR PRESSURE, mm Hg @ 20°C: Not determined. pH: > 12.0

PARTITION COEFFICIENT (n-octanol/water): Not established. VISCOSITY: < 100 cPs

ODOR THRESHOLD: Not established.

FLASH POINT: >200 F

APPEARANCE and COLOR: This is light-yellow to brown liquid with a bland odor.

<u>HOW TO DETECT THIS SUBSTANCE (warning properties)</u>: The color may be a distinguishing characteristic in event of accidental release.

#### 9.2 Other information

**NOT AVAILABLE** 

## SECTION 10. STABILITY and REACTIVITY

#### 10.1 Chemical stability

Stable.

#### 10.2 Possibility of hazardous reactions

**Hazardous Polymerization:** Hazardous polymerization does not occur.

**Hazardous Reactions:**None under normal processing.

#### 10.3 Materials to avoid

Chlorine containing compounds.

## 10.4 Incompatible materials

This product is incompatible with strong oxidizers and chemicals incompatible with water.

## 10.5 Hazardous decomposition products

Thermal decomposition will generate oxides of carbon, nitrogen and sulfur.

## SECTION 11. TOXICOLOGICAL INFORMATION

(a) acute toxicity: LD50 (Oral-Rat) No data available

(b) skin corrosion/irritation; Mild skin irritation(c) serious eye damage/irritation; Eye irritation

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity: No data available on the product itself

(f) carcinogenicity; No data available

(g) reproductive toxicity; No data available on the product itself

(h) STOT-single exposure; No data available(i) STOT-repeated exposure; No data available

Target Organs Skin, Respiratory system, Eyes

(j) aspiration hazard; No data available

## **SECTION 12. ECOLOGICAL INFORMATION**

#### 12.1. Toxicity

#### **Ecotoxicity effects**

Aquatic toxicity: No information available.

12.2. Persistence and degradability Biodegradable

**Persistence:** Soluble in water, persistence is unlikely.

**12.3.** Bioaccumulative potential Bioaccumulation is unlikely

**12.4. Mobility in soil** The product is water soluble, and may spread in water

systems. Highly mobile in soils.

12.5. Results of PBT and vPvB assessment Substance is not considered persistent, bioaccumulative

And toxic (PBT) / very persistent and very

bioaccumulative (vPvB).

#### 12.6. Other adverse effects

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

Persistent Organic Pollutant This product does not contain any known or suspected substance Ozone Depletion Potential This product does not contain any known or suspected substa

## **SECTION 13. DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This solution, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority.

### SECTION 14. TRANSPORTATION INFORMATION

<u>PROPER SHIPPING NAME</u>: Sodium hydroxide solution <u>HAZARD CLASS NUMBER and DESCRIPTION</u>: 8 (Corrosive Material)

UN IDENTIFICATION NUMBER: UN 1824
PACKING GROUP: II

DOT LABEL(S) REQUIRED: Corrosive

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000): 154

MARINE POLLUTANT: No component of this product is designated by the Department of Transportation to be a Marine Pollutant as per 49 CFR 172.101, Appendix B.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This material is not considered as dangerous goods.

<u>INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA) DESIGNATION</u>: This material is considered as dangerous goods under the International Air Transport Association rules.

#### SECTION 15. REGULATORY INFORMATION

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### **ADDITIONAL UNITED STATES REGULATIONS:**

<u>SARA REPORTING REQUIREMENTS</u>: The components of this product are not subject to the reporting requirements of Sections 302, 304 and 313 of Title III of the Superfund Amendments and Reauthorization Act.

<u>U.S. SARA THRESHOLD PLANNING QUANTITY</u>: There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lb (4,540 kg) may apply, per 40 CFR 370.20.

<u>U.S. TSCA INVENTORY STATUS</u>: The components of this product are listed on the TSCA Inventory.

<u>U.S. CERCLA REPORTABLE QUANTITY (RQ)</u>: For information on the U.S. CERCLA RQs for the components of this product, contact the business phone number listed in Section 1 (Product Identification).

OTHER U.S. FEDERAL REGULATIONS: Not applicable.

<u>U.S. STATE REGULATORY INFORMATION</u>: For information on requirements for components of this product under the States indicated below, contact the business phone number listed in Section 1 (Product Identification).

Alaska - Designated Toxic and Hazardous Substances: See above. California - Permissible Exposure Limits for

Chemical Contaminants: See above.
Florida - Substance List: See above.
Illinois - Toxic Substance List: See above.
Kansas - Section 302/313 List: See above.

Massachusetts - Substance List: See above.

Michigan - Critical Materials Register: See above.

Minnesota - List of Hazardous Substances: See above.

Missouri - Employer Information/Toxic

Substance List: See above.

New Jersey - Right to Know Hazardous Substance List: See above.

North Dakota - List of Hazardous Chemicals, Reportable Quantities: See above. Pennsylvania - Hazardous Substance List: See above.

Rhode Island - Hazardous Substance List: See above.

**Texas - Hazardous Substance List:** Sodium See above.

West Virginia - Hazardous Substance List: See above.

Wisconsin - Toxic and Hazardous Substance List: See above.

<u>CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65)</u>: This product DOES NOT contain any chemicals that are known by the State of California to cause cancer.

ANSI LABELING (Z129.1): CAUTION! MAY CAUSE SKIN AND EYE IRRITATION. MAY BE HARMFUL IF INGESTED OR INHALED. Avoid contact with skin, eyes, or clothing. Wash thoroughly after handling. Avoid breathing aerosols, mists, and sprays. Work in well-ventilated area. Do not taste or swallow. Wear gloves, goggles, and appropriate body protection. FIRST-AID: In case of contact with skin or eyes, flush skin with plenty of water for 15 minutes. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, do not induce vomiting. Get medical attention if adverse effects develop. IN CASE OF FIRE: Use water fog, dry chemical, CO<sub>2</sub>, or "alcohol" foam. IN CASE OF SPILL: Absorb spill with inert material (sand, polypads, or other absorbent). For large spills, dike area. Consult Material Safety Data Sheet for additional information.

#### **ADDITIONAL CANADIAN REGULATIONS:**

CANADIAN DSL/NDSL INVENTORY STATUS: The components of this product are listed on the DSL Inventory.

OTHER CANADIAN REGULATIONS: Not applicable.

<u>CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITY SUBSTANCES LISTS</u>: The components of this product are not on the CEPA Priority Substances Lists.

CANADIAN WHMIS SYMBOLS: Not Applicable

## **SECTION 16. OTHER INFORMATION**

PREPARED BY: CLEAR SOLUTIONS U.S.A.

47 N. Ski Court Gilbert, AZ 85233 March 29, 2021

**DATE OF PRINTING:** 

All statements, technical information and recommendations herein are based on tests we believe to be reliable, but the accuracy or completeness thereof is not guaranteed. THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PURPOSE. Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Before using, user shall determine the suitability of the product for its intended use, and user assumes all risks and liability whatsoever in connection therewith.

NEITHER SELLER NOR MANUFACTURER SHALL BE LIABLE EITHER IN TORT OR IN CONTRACT FOR ANY LOSS OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL, ARISING OUT OF THE USE OR THE INABILITY TO USE THE PRODUCT.

#### **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 #: This is the Chemical Abstract Service Number which uniquely identifies each constituent.

#### **EXPOSURE LIMITS IN AIR:**

ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits. TLV - Threshold Limit Value - an airborne concentration of a substance which represents conditions under which it is generally believed that nearly all workers may 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 which 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. The 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.

#### HAZARD RATINGS:

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: 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 result in permanent injury and may be fatal); 4 (extreme acute exposure hazard; onetime overexposure can be fatal). 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: <u>Health Hazard</u>: 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 causes death or major residual injury). <u>Flammability Hazard and Reactivity Hazard</u>: 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:**

Human and Animal Toxicology: 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, and LDo, or TC, TCo, LCLo, and LCo, the lowest dose (or concentration) to cause lethal or toxic effects. Cancer Information: The sources are: IARC - the International Agency for Research on Cancer; NTP - the National Toxicology Program, RTECS - the Registry of Toxic Effects of Chemical Substances, OSHA and CAL/OSHA. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other Information: BEI - 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 a worker with inhalation exposure to the TLV. Ecological Information: EC is the effect concentration in water. Bioconcentration Factor, which is used to determine if a substance will concentrate in lifeforms which consume contaminated plant or animal matter. Coefficient of Oil/Water Distribution is represented by log Kow or  $\log K_{oc}$  and is used to assess a substance's behavior in the environment.

#### **REGULATORY INFORMATION:**

This section explains the impact of various laws and regulations on the material. U.S.: EPA is the U.S. Environmental Protection Agency. DOT is the U.S. Department of Transportation. SARA is the Superfund Amendments and Reauthorization Act. TSCA is the U.S. Toxic Substance Control Act. CERCLA (or Superfund) refers to the Comprehensive Environmental Response, Compensation, and Liability Act. Labeling is per the American National Standards Institute (ANSI Z129.1). CANADA: CEPA is the Canadian Environmental Protection Act. WHMIS is the Canadian Workplace Hazardous Materials Information System. TC is Transport Canada. DSL/NDSL are the Canadian Domestic/Non-Domestic Substances Lists.