


# SAFETY DATA SHEET

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards      SDS Revision: 1.1      SDS Revision Date: 9/5/2017

## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	<b>LANZA HEALING COLOR 40 VOLUME CREAM DEVELOPER (12%)</b>
1.2	Chemical Name:	NA
1.3	Synonyms:	Healing Color 40 Volume Cream Developer
1.4	Trade Names:	Lanza Healing Color 40 Volume Cream Developer (12%)
1.5	Product Uses & Restrictions:	Professional Use Only
1.6	Distributor's Name:	TU-K Industries, Inc.
1.7	Distributor's Address:	5702 Firestone Place, South Gate, CA 90280
1.8	Emergency Phone:	<b>CHEMTEL: +1 (800) 255-3924 / +01-813-248-0585</b>
1.9	Business Phone / Fax:	+1 (562) 927-3365 / +1 (562) 928-8154

## 2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	This product is classified as a HAZARDOUS SUBSTANCE and as DANGEROUS GOODS according to the classification criteria of NOHSC: 1088 (2004) and ADG Code (Australia). <b>DANGER! CAUSES SERIOUS EYE DAMAGE. CAUSES SKIN IRRITATION.</b> Classification: Eye Dam. 1; Skin Irrit. 3	
2.2	Label Elements:	Hazard Statements (H): H318 – Causes serious eye damage. H315 – Causes skin irritation. Precautionary Statements (P): P264 – Wash thoroughly after handling. P280 – Wear protective gloves and eye/face protection. P302+P352 – IF ON SKIN: Wash with plenty of soap and water. P332+P313 – If skin irritation occurs: Get medical advice/attention. P305+P351+P338 – IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing. P310 – Immediately call a POISON CENTER/doctor. P337+P313 – If eye irritation persists: Get medical advice/attention. P405 – Store locked up.	
2.3	Other Warnings:	<b>KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.</b> Preliminary patch testing is recommended. Tattoos, including black and temporary henna, may increase the risk of an allergic skin reaction. If a severe allergic reaction should occur, immediately seek medical attention. This product must not be used for dyeing the eyelashes or eyebrows - to do so may cause blindness.	

## 3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m <sup>3</sup> )									OTHER
					ACGIH		NOHSC			OSHA				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
AQUA (WATER/EAU)	7732-18-5	ZC0110000	231-791-2	80-100	NA	NA	NF	NF	NF	NA	NA	NA		
HYDROGEN PEROXIDE	7722-84-1	MX0900000	231-765-0	11-12.5	(1.4)	NA	(1.4)	NF	NF	(1.4)	NA	75		
	Eye Dam. 1; Skin Irrit. 2; H318, H315													
DECYL OLEATE	3687-46-5	NA	222-981-6	3.0-11	NA	NA	NF	NF	NF	NA	NA	NA		
CETEARYL ALCOHOL	67762-27-0	NA	267-008-6	1.0-5.0	NA	NA	NF	NF	NF	NA	NA	NA		
CETEARETH-25	68439-49-6	NA	NA	1.0-5.0	NA	NA	NF	NF	NF	NA	NA	NA		
DIPOTASSIUM PHOSPHATE	7758-11-4	NA	231-834-5	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
SALICYLIC ACID	69-72-7	NA	200-712-3	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
ETIDRONIC ACID	2809-21-4	SZ8562100	220-552-8	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
	Met. Corr. 1; Acute Tox. 4; Eye Dam. 1; H290, H302, H318													
PHOSPHONIC ACID	13598-36-2	SZ6400000	237-066-7	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
	Acute Tox. 4*; Skin Corr. 1A; H302, H314													
PANTHENOL	81-13-0	NA	201-327-3	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
KERATIN AMINO ACIDS	NA	NA	NA	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
GLYCERIN	56-81-5	MA8050000	200-289-5	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		
LANZA BOTANICAL BLEND	NA	NA	NA	0.0-1.0	NA	NA	NF	NF	NF	NA	NA	NA		

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## 4. FIRST AID MEASURES

4.1	First Aid:	<p><b>Ingestion:</b> If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to an unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed.</p> <p><b>Eyes:</b> Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. Seek immediate medical attention.</p> <p><b>Skin:</b> If irritation occurs and product is on the skin, rinse thoroughly with lukewarm water, followed by a thorough washing of the affected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.</p> <p><b>Inhalation:</b> Remove victim to fresh air at once.</p>											
4.2	Effects of Exposure:	<p><b>Ingestion:</b> If product is swallowed, may cause nausea, vomiting and/or diarrhea.</p> <p><b>Eyes:</b> Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p><b>Skin:</b> May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.</p> <p><b>Inhalation:</b> None expected.</p>											
4.3	Symptoms of Overexposure:	Overexposure in eyes may cause severe damage, redness, itching and watering. Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.											
4.4	Acute Health Effects:	Severe irritation to eyes. Symptoms of overexposure may include redness, itching, stinging, irritation and watering. Moderate irritation to skin near affected areas.											
4.5	Chronic Health Effects:	No harmful or chronic health effects are expected to occur from a single accidental ingestion.											
4.6	Target Organs:	Eyes, Skin, Respiratory System											
4.7	Medical Conditions Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system).	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #0000FF; color: white;"><b>HEALTH</b></td> <td style="text-align: center;"><b>2</b></td> </tr> <tr> <td style="background-color: #FF0000; color: white;"><b>FLAMMABILITY</b></td> <td style="text-align: center;"><b>0</b></td> </tr> <tr> <td style="background-color: #FFA500; color: white;"><b>PHYSICAL HAZARDS</b></td> <td style="text-align: center;"><b>1</b></td> </tr> <tr> <td colspan="2" style="background-color: #000000; color: white;"><b>PROTECTIVE EQUIPMENT</b></td> </tr> <tr> <td style="background-color: #000000; color: white;"><b>EYES</b></td> <td style="background-color: #000000; color: white;"><b>SKIN</b></td> </tr> </table>	<b>HEALTH</b>	<b>2</b>	<b>FLAMMABILITY</b>	<b>0</b>	<b>PHYSICAL HAZARDS</b>	<b>1</b>	<b>PROTECTIVE EQUIPMENT</b>		<b>EYES</b>	<b>SKIN</b>
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<b>PHYSICAL HAZARDS</b>	<b>1</b>												
<b>PROTECTIVE EQUIPMENT</b>													
<b>EYES</b>	<b>SKIN</b>												

## 5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	Will not burn, but decomposition, which may be caused by heat, will release oxygen which will increase the explosive limit range and burning rate of flammable vapors. As a result of combustion and thermal decomposition, oxidation products may form and exposure to such products may result in health hazards.	
5.2	Extinguishing Methods:	Use only large quantities of water. Flood with water and use water spray to cool fire-exposed containers and structures.	
5.3	Firefighting Procedures:	As in any fire, wear MSHA/NIOSH approved self-contained breathing apparatus (pressure-demand) and full protective gear. Keep containers cool until well after the fire is out. Use water spray to cool fire-exposed surfaces and to protect personnel. Prevent runoff from fire control or dilution from entering sewers, drains, drinking water supply, or any natural waterway. Firefighters must use full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous decomposition products.	

## 6. ACCIDENTAL RELEASE MEASURES

6.1	Spills:	<p>Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment (PPE). Keep incompatible materials (e.g., organics such as oil) away from spill.</p> <p>For <u>small spills</u> (e.g., &lt; 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows). Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse.</p> <p>For <u>large spills</u> (e.g., ≥ 1 gallon (3.8 L)), deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.</p>
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## 7. HANDLING & STORAGE INFORMATION

7.1	Work & Hygiene Practices:	Do not eat, drink, or smoke while handling this product. Wash thoroughly after handling. Avoid contact with flammable or combustible materials. Avoid contamination from any source, including metals, dust and organic materials. Keep bulk covered. Wash unintentional residues with soap and warm water.
7.2	Storage & Handling:	Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans). Keep away from excessive heat and open flames. Avoid temperatures above 120 °F. Keep away from incompatible substances. Protect containers from physical damage.
7.3	Special Precautions:	Spilled material may present a slipping hazard if left unattended. Clean all spills promptly.

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## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1	Exposure Limits: ppm (mg/m <sup>3</sup> )	ACGIH		NOHSC			OSHA			OTHER
		CHEMICAL NAME(S)	TLV (1.4)	STEL NA	ES-TWA (1.4)	ES-STEL NF	ES-PEAK NF	PEL (1.4)	STEL NA	
		HYDROGEN PEROXIDE								
8.2	Ventilation & Engineering Controls:	When working with large quantities of product, provide adequate ventilation (e.g., local exhaust ventilation, fans). Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.								
8.3	Respiratory Protection:	No special respiratory protection is required under typical circumstances of use or handling. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134, or applicable U.S. state regulations, or the appropriate standards of Canada, its provinces, E.C. member states, or Australia.								
8.4	Eye Protection:	<b>AVOID EYE CONTACT DUE TO IRRITATION POTENTIAL.</b> Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling large quantities (e.g., ≥ 1 gallon (3.8 L)) of this product. Always use protective eyewear when cleaning spills or leaks. Contact lenses pose a special hazard; soft lenses may absorb and concentrate irritants.								
8.5	Hand Protection:	<b>AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL.</b> If anticipated that prolonged & repeated skin contact will occur during use of this product, wear latex or rubber gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, the appropriate standards of Canada, of the E.C. member states.								
8.6	Body Protection:	<b>AVOID SKIN CONTACT DUE TO SENSITIZING POTENTIAL.</b> However, no special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate standards of Canada, the E.C. member states, or U.S. OSHA.								



## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	White or off-white free flowing lotion
9.2	Odor:	Characteristic
9.3	Odor Threshold:	NA
9.4	pH:	2.5-3.5
9.5	Melting Point/Freezing Point:	NA
9.6	Initial Boiling Point/Boiling Range:	NA
9.7	Flashpoint:	NA
9.8	Upper/Lower Flammability Limits:	NA
9.9	Vapor Pressure:	NA
9.10	Vapor Density:	NA
9.11	Relative Density:	NA
9.12	Solubility:	Partial to complete
9.13	Partition Coefficient (log P <sub>ow</sub> ):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	8,000-10,000 cPs
9.17	Other Information:	NA

## 10. STABILITY & REACTIVITY

10.1	Stability:	This product is stable.
10.2	Hazardous Decomposition Products:	Oxides of carbon (CO, CO <sub>2</sub> ) and sulfur (SO <sub>2</sub> ). Liberation of gas may result in dangerous pressure.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Open flames, sparks and high heat, direct sunlight.
10.5	Incompatible Substances:	Store away from flammable liquids, flammable solids, aerosols and other incompatible materials (e.g., reducing materials, combustible materials, metal contamination like iron, copper their alloys). Avoid contamination. Do not store any tint, lightener lotion or bleach powder after it has been mixed with developer; the container may rupture. Never return unused material to original container. Avoid extreme heat and ignition sources.

## 11. TOXICOLOGICAL INFORMATION

11.1	Routes of Entry:	Inhalation: YES	Absorption: YES	Ingestion: YES
11.2	Toxicity Data:	This product has not been tested on animals to obtain toxicological data. There are toxicology data for the components of this product, which are found in the scientific literature.		
11.3	Acute Toxicity:	See Section 4.4		
11.4	Chronic Toxicity:	See Section 4.5		
11.5	Suspected Carcinogen:	This product contains <u>Hydrogen peroxide</u> , listed as: ACGIH Group A3; IARC Group 3: Not classifiable as to it's carcinogenicity to humans.		

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## 11. TOXICOLOGICAL INFORMATION – cont'd

11.6	Reproductive Toxicity:	This product is not reported to produce reproductive toxicity in humans.
	Mutagenicity:	This product is not reported to produce mutagenic effects in humans.
	Embryotoxicity:	This product is not reported to produce embryotoxic effects in humans.
	Teratogenicity:	This product is not reported to cause teratogenic effects in humans.
	Reproductive Toxicity:	This product is not reported to cause reproductive effects in humans.
11.7	Irritancy of Product:	See Section 4.3
11.8	Biological Exposure Indices:	NE
11.9	Physician Recommendations:	Treat symptomatically.

## 12. ECOLOGICAL INFORMATION


12.1	Environmental Stability:	There are no specific data available for this product.
12.2	Effects on Plants & Animals:	There are no specific data available for this product.
12.3	Effects on Aquatic Life:	There are no specific data available for this product.

## 13. DISPOSAL CONSIDERATIONS


13.1	Waste Disposal:	Dispose of in accordance with federal, state and local regulations.
13.2	Special Considerations:	NA

## 14. TRANSPORTATION INFORMATION

The basic description (ID Number, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. Additional descriptive information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.

14.1	49 CFR (GND):	UN2984, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS (12%), 5.1, III (LTD QTY, IP VOL ≤ 5.0 L)	
14.2	IATA (AIR):	UN2984, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS (12%), 5.1, III (LTD QTY, IP VOL ≤ 0.5 L, PI Y541)	
14.3	IMDG (OCN):	UN2984, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS (12%), 5.1, III (LTD QTY, IP VOL ≤ 5.0 L)	
14.4	TDGR (Canadian GND):	UN2984, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS (12%), 5.1, III (LTD QTY, IP VOL ≤ 5.0 L)	
14.5	ADR/RID (EU):	UN2984, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS (12%), 5.1, III (LTD QTY, IP VOL ≤ 5.0 L)	
14.6	SCT (MEXICO):	UN2984, PEROXIDO DE HIDROGENO EN SOLUCION ACUOSA (12%), 5.1, III (CANTIDAD LIMITADA, IP VOL ≤ 5.0 L)	
14.7	ADGR (AUS):	UN2984, HYDROGEN PEROXIDE, AQUEOUS SOLUTIONS (12%), 5.1, III (LTD QTY, IP VOL ≤ 5.0 L)	

## 15. REGULATORY INFORMATION

15.1	SARA Reporting Requirements:	This product does not contain any substances subject to SARA Title III, section 313 reporting requirements.	
15.2	SARA Threshold Planning Quantity:	There are no specific Threshold Planning Quantities for the components of this product.	
15.3	TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.	
15.4	CERCLA Reportable Quantity (RQ):	NA	
15.5	Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics). This material does not contain any hazardous air pollutants. None of the components in this product are listed as priority pollutants under the CWA. None of the components in this product are listed as toxic pollutants under the CWA.	
15.6	Other Canadian Regulations:	This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDL. None of the components of this product are listed on the Priorities Substances List. WHMIS	
15.7	State Regulatory Information:	<u>Hydrogen Peroxide</u> is found on the following state criteria list: Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), Pennsylvania Right-to-Know List (PA) and Washington Permissible Exposures List (WA). <u>Etidronic Acid</u> is found on the following state criteria list: NJ and PA. No other ingredients in this product, present in a concentration of 1.0% or greater, are listed on any of the following state criteria lists: California Proposition 65 (CA65), Delaware Air Quality Management List (DE), Florida Toxic Substances List (FL), Massachusetts Hazardous Substances List (MA), Michigan Critical Substances List (MI), Minnesota Hazardous Substances List (MN), New Jersey Right-to-Know List (NJ), New York Hazardous Substances List (NY), Pennsylvania Right-to-Know List (PA), Washington Permissible Exposures List (WA), Wisconsin Hazardous Substances List (WI).	
15.8	Other Requirements:	NA	

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## 16. OTHER INFORMATION

16.1	Other Information:	<p><b>DANGER! CAUSES SERIOUS EYE DAMAGE. CAUSES SKIN IRRITATION.</b> For external use only. Use only as directed. Discontinue use immediately if irritation develops. Keep away from children. Keep container tightly closed in a cool place. When using do not eat or drink. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. If skin irritation occurs: Get medical advice/attention. If case of accident or if you feel unwell seek medical advice immediately (show the label where possible). <b>KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.</b> Preliminary patch testing is recommended. Tattoos, including black and temporary henna, may increase the risk of allergy, If a severe allergic reaction should occur, immediately seek medical attention. This product must not be used for dyeing the eyelashes or eyebrows; to do so may cause blindness.</p>
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.
16.3	Disclaimer:	This Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & TU-K Industries (2K Industries), knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.
16.4	Prepared for:	<p><b>TU-K Industries, Inc. (2K)</b> 5702 Firestone Place South Gate, CA 90280 USA Tel: +1 (562) 927-3365 Fax: +1 (562) 928-8154 <a href="http://www.2kindustries.com">http://www.2kindustries.com</a></p>
16.5	Prepared by:	<p><b>ShipMate, Inc.</b> P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 <a href="http://www.shipmate.com">http://www.shipmate.com</a></p> 

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## DEFINITION OF TERMS

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

### GENERAL INFORMATION:

<b>CAS No.</b>	Chemical Abstract Service Number
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### EXPOSURE LIMITS IN AIR:

<b>ACGIH</b>	American Conference on Governmental Industrial Hygienists
<b>C</b>	Ceiling Limit
<b>ES</b>	Exposure Standard (Australia)
<b>IDLH</b>	Immediately Dangerous to Life and Health
<b>OSHA</b>	U.S. Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>STEL</b>	Short-Term Exposure Limit
<b>TLV</b>	Threshold Limit Value
<b>TWA</b>	Time Weighted Average

### FIRST AID MEASURES:

<b>CPR</b>	Cardiopulmonary resuscitation - method in which a person whose heart has stopped receives manual chest compressions and breathing to circulate blood and provide oxygen to the body.
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### HMIS-III HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

<b>0</b>	Minimal Hazard
<b>1</b>	Slight Hazard
<b>2</b>	Moderate Hazard
<b>3</b>	Severe Hazard
<b>4</b>	Extreme Hazard

<b>HEALTH</b>
<b>FLAMMABILITY</b>
<b>PHYSICAL HAZARDS</b>
<b>PERSONAL PROTECTION</b>

### PERSONAL PROTECTION RATINGS:

<b>A</b>		<b>G</b>	
<b>B</b>		<b>H</b>	
<b>C</b>		<b>I</b>	
<b>D</b>		<b>J</b>	
<b>E</b>		<b>K</b>	
<b>F</b>		<b>X</b>	Consult your supervisor or SOPs for special handling directions.

Safety Glasses	Splash Goggles	Face Shield & Protective Eyewear	Gloves
Boots	Synthetic Apron	Protective Clothing & Full Suit	Dust Respirator
Full Face Respirator	Dust & Vapor Half-Mask Respirator	Full Face Respirator	Airline Hood/Mask or SCBA

### OTHER STANDARD ABBREVIATIONS:

<b>ML</b>	Maximum Limit
<b>mg/m3</b>	milligrams per cubic meter
<b>NA</b>	Not Available
<b>ND</b>	Not Determined
<b>NE</b>	Not Established
<b>NF</b>	Not Found
<b>NR</b>	No Results
<b>ppm</b>	parts per million
<b>SCBA</b>	Self-Contained Breathing Apparatus

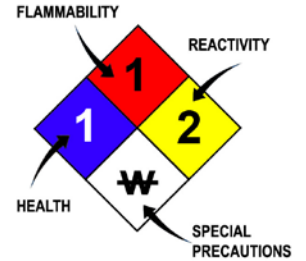
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

### FLAMMABILITY LIMITS IN AIR:

<b>Autoignition Temperature</b>	Minimum temperature required to initiate combustion in air with no other source of ignition
<b>LEL</b>	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source
<b>UEL</b>	Upper Explosive Limit - highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source

### HAZARD RATINGS:

<b>0</b>	Minimal Hazard
<b>1</b>	Slight Hazard
<b>2</b>	Moderate Hazard
<b>3</b>	Severe Hazard
<b>4</b>	Extreme Hazard
<b>ACD</b>	Acidic
<b>ALK</b>	Alkaline
<b>COR</b>	Corrosive
<b>W</b>	Use No Water
<b>OX</b>	Oxidizer
<b>TREFOIL</b>	Radioactive



### TOXICOLOGICAL INFORMATION:

<b>LD<sub>50</sub></b>	Lethal Dose (solids & liquids) which kills 50% of the exposed animals
<b>LC<sub>50</sub></b>	Lethal concentration (gases) which kills 50% of the exposed animal
<b>ppm</b>	Concentration expressed in parts of material per million parts
<b>TD<sub>10</sub></b>	Lowest dose to cause a symptom
<b>TCLo</b>	Lowest concentration to cause a symptom
<b>TD<sub>101</sub>, LD<sub>101</sub>, &amp; LD<sub>01</sub> or TC, TC<sub>01</sub>, LC<sub>101</sub>, &amp; LC<sub>01</sub></b>	Lowest dose (or concentration) to cause lethal or toxic effects
<b>IARC</b>	International Agency for Research on Cancer
<b>NTP</b>	National Toxicology Program
<b>RTECS</b>	Registry of Toxic Effects of Chemical Substances
<b>BCF</b>	Bioconcentration Factor
<b>TL<sub>m</sub></b>	Median threshold limit
<b>log K<sub>ow</sub> or log K<sub>oc</sub></b>	Coefficient of Oil/Water Distribution

### REGULATORY INFORMATION:

<b>WHMIS</b>	Canadian Workplace Hazardous Material Information System
<b>DOT</b>	U.S. Department of Transportation
<b>TC</b>	Transport Canada
<b>EPA</b>	U.S. Environmental Protection Agency
<b>DSL</b>	Canadian Domestic Substance List
<b>NOHSC</b>	National Occupational Health and Safety Commission (Australia)
<b>NDSL</b>	Canadian Non-Domestic Substance List
<b>PSL</b>	Canadian Priority Substances List
<b>TSCA</b>	U.S. Toxic Substance Control Act
<b>EU</b>	European Union (European Union Directive 67/548/EEC)
<b>WGK</b>	Wassergefährdungsklassen (German Water Hazard Class)
<b>HMIS-III</b>	National Paint & Coatings Association Hazardous Materials Identification System

### WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

Class A	Class B	Class C	Class D1	Class D2	Class D3	Class E	Class F
Compressed	Flammable	Oxidizing	Toxic	Irritation	Infectious	Corrosive	Reactive

### CLP/GHS (1272/2008/EC) PICTOGRAMS:

GHS01	GHS02	GHS03	GHS04	GHS05	GHS06	GHS07	GHS08	GHS09
Explosive	Flammable	Oxidizer	Pressurized	Corrosive	Toxic	Harmful Irritating	Health Hazard	Environment