




## 1. PRODUCT & COMPANY IDENTIFICATION

1.1	Product Name:	<b>OYA® LIGHTENING POWDER</b>
1.2	Chemical Name:	NA
1.3	Synonyms:	NA
1.4	Trade Names:	OYA® Lightening Powder
1.5	Product Uses & Restrictions:	Professional or Cosmetic Use Only
1.6	Distributor's Name:	Helias LLC
1.7	Distributor's Address:	17030 Ventura Blvd, Suite 200, Los Angeles, CA 91316 USA
1.8	Emergency Phone:	<b>CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-3887</b>
1.9	Business Phone / Fax:	+1 (310) 437-4480 / +1 (310) 437-4481

## 2. HAZARDS IDENTIFICATION

2.1	Hazard Identification:	<p>Prepared in accordance with UN Globally Harmonized standards. Intended to comply with OSHA 29 CFR 1910.1200, Canadian WHMIS and Australian Work Health and Safety standards. This product is classified as a hazardous substance BUT NOT as dangerous goods according to the classification criteria of WHSR and ADG Code (Australia).</p> <p><b>DANGER! MAY INTENSIFY FIRE - OXIDIZER. HARMFUL IF SWALLOWED. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. MAY CAUSE RESPIRATOR</b></p> <p>Classification: Oxidizing Solids 2, Acute Tox. (oral) 4, Skin Irrit. 2, Skin Sens. 1, Eye Irrit. 2A, Resp. Sens. 1, STOT SE 3</p>	  
2.2	Label Elements:	<p><b>Hazard Statements (H):</b> H272 – May intensify fire; oxidizer. H302 – Harmful if swallowed. H315 – Causes skin irritation. H317 – May cause an allergic skin reaction. H319 – Causes serious eye irritation. H334 – May cause allergy or asthma symptoms or breathing difficulties.</p> <p><b>Precautionary Statements (P):</b> P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. P220 – Keep/Store away from clothing/combustible materials. P261 – Avoid breathing dust/vapors. P264 – Wash thoroughly after handling. No smoking. P270 – Do not eat, drink or smoke when using this product. P271 – Use only outdoors or in a well-ventilated area. P280 – Wear protective gloves and eye protection. P301+P312 – IF SWALLOWED: Call a POISON CENTER/DOCTOR if you feel unwell. P302+P352 – IF ON SKIN: Wash with plenty of soap and water. P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P312 – Call a POISON CENTER/DOCTOR if you feel unwell. P321 – Specific treatment see section 4 of this SDS. P330 – Rinse mouth. P332+P313 – If skin irritation occurs: Get medical advice/attention. P342 + P311 – If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P362+P364 – Take off contaminated clothing and wash it before reuse. P370 +P378 – In case of fire: use water, foam, CO2, dry chemical or Halon (if authorized). P403+P235 – Store in a well-ventilated place. Keep cool. P405 – Store locked up. P501 – Dispose of contents/container to a licensed treatment, storage or disposal facility (TSDF).</p>	
2.3	Other Warnings:	<p><b>KEEP OUT OF REACH OF CHILDREN.</b></p> <p><b>NOTICE:</b> This product is designed and intended for use by a licensed cosmetologist/professional hairdresser only, and carries no warranty, expressed or implied, if used by others. 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>	

## 3. COMPOSITION & INGREDIENT INFORMATION

CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	EXPOSURE LIMITS IN AIR (mg/m³)									OTHER
					ACGIH		NOHSC			OSHA				
					ppm		ppm			ppm				
					TLV	STEL	ES-TWA	ES-STEL	ES-PEAK	PEL	STEL	IDLH		
POTASSIUM PERSULFATE	7727-21-1	SE0400000	231-781-8	40-70	0.1	NE	NF	NF	NF	NF	NE	NE	NE	Ox. Sol. 3; Acute Tox. 4; Skin Irrit. 2; Skin Sens. 1; Eye Irrit. 2; Resp. Sens. 1; STOT SE 3; H272, H302, H315, H317, H319, H334, H335
SODIUM SILICATE	1344-09-8	NA	215-687-4	15-40	NA	NA	NF	NF	NF	NA	NA	NA		
AMMONIUM CHLORIDE	12125-02-9	BP4550000	235-186-4	5-10	(10)	NA	(10)	(20)	NF	(10)	NA	NA		
SODIUM METASILICATE	6834-92-0	VV9275000	229-912-9	5-10	NA	NA	NF	NF	NF	NA	NA	NA		
CELLULOSE GUM	9025-56-3	NA	233-799-9	1-5	NA	NA	NF	NF	NF	NA	NA	NA		
TALC*	14807-96-6	WW2710000	238-877-9	1-5	2	NA	NF	2.5	NF	2	NA	1000		
ALOE (VERA) BARBADENSIS LEAF EXTRACT	85507-69-3	NA	287-390-8	1-5	NA	NA	NF	NF	NF	NA	NA	NA		


### 3. COMPOSITION & INGREDIENT INFORMATION – cont'd

TETRASODIUM EDTA	64-02-8	NA	200-573-9	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	
	Acute tox. 4; Eye Dam. 1; H302, H318												
PARAFFINUM LIQUIDUM (MINERAL OIL)	8012-95-1	PY8030000	232-384-2	0.1-1	5	10	NF	5	NF	5	10	2500	MIST
CI 77007 (ULTRAMARINES)	1317-97-1	NA	215-711-3	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	
FRAGRANCE (PARFUM)	NA	NA	NA	0.1-1	NA	NA	NF	NF	NF	NA	NA	NA	
CI 42090 (BLUE1)	3844-45-9	NA	219-163-6	0-0.1	NA	NA	NF	NF	NF	NA	NA	NA	

### 4. FIRST AID MEASURES

4.1	First Aid:	<p><u>Ingestion:</u> If ingested, DO NOT INDUCE VOMITING. Seek immediate medical attention. Contact the nearest Poison Control Center or local emergency telephone number for assistance and instructions. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. If vomiting occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.</p> <p><u>Eyes:</u> If product gets in the eyes, remove contact lenses (if used), flush eyes thoroughly with copious amounts of water for at least 15 minutes, holding eyelid(s) open to ensure complete flushing. Seek immediate medical attention.</p> <p><u>Skin:</u> Remove contaminated clothing and wash affected areas with soap and water. If discomfort persists and/or the skin reaction worsens, contact a physician immediately. Do not wear contaminated clothing until after it has been properly cleaned.</p> <p><u>Inhalation:</u> Remove victim to fresh air at once. If not breathing, give artificial respiration and contact a physician or local emergency services immediately.</p>															
4.2	Effects of Exposure:	<p><u>Ingestion:</u> Harmful if swallowed. If product is swallowed, may cause nausea, vomiting and/or diarrhea and central nervous system depression.</p> <p><u>Eyes:</u> Severe or permanent eye damage. Symptoms of overexposure may include redness, itching, irritation and watering.</p> <p><u>Skin:</u> Prolonged contact with skin may bleach it and cause burns. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals.</p> <p><u>Inhalation:</u> Harmful by inhalation. May cause severe irritation or burns in respiratory tract and mucous membranes. Possible lung damage.</p>															
4.3	Symptoms of Overexposure:	<p>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.</p> <p><u>Ingestion:</u> Nausea, severe abdominal pain, vomiting and/or diarrhea.</p> <p><u>Eyes:</u> Severe or permanent eye damage.</p> <p><u>Skin:</u> Redness, burning, itching, rash, blistering of skin.</p> <p><u>Inhalation:</u> Harmful by inhalation. May cause severe irritation or burns in respiratory tract and mucous membranes. Possible lung damage.</p>															
4.4	Acute Health Effects:	May cause severe eye irritation and possible eye injury. Prolonged contact with skin may bleach it and cause burns. Inhalation of vapours or aerosols (mists, fumes) may cause lung oedema. Corrosive substances may cause lung damage (e.g. lung oedema, fluid in the lungs).															
4.5	Chronic Health Effects:	Severe or permanent eye damage. May cause allergic respiratory and skin reactions.															
4.6	Target Organs:	Eyes, Skin, Respiratory System															
4.7	Medical Conditions Aggravated by Exposure:	<p>Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin, and respiratory system).</p> <table><tr><td colspan="2">HEALTH</td><td>1</td></tr><tr><td colspan="2">FLAMMABILITY</td><td>1</td></tr><tr><td colspan="2">PHYSICAL HAZARDS</td><td>1</td></tr><tr><td colspan="2">PROTECTIVE EQUIPMENT</td><td>B</td></tr><tr><td>EYES</td><td>SKIN</td><td></td></tr></table>	HEALTH		1	FLAMMABILITY		1	PHYSICAL HAZARDS		1	PROTECTIVE EQUIPMENT		B	EYES	SKIN	
HEALTH		1															
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PHYSICAL HAZARDS		1															
PROTECTIVE EQUIPMENT		B															
EYES	SKIN																

### 5. FIREFIGHTING MEASURES

5.1	Fire & Explosion Hazards:	None reported by manufacturer. Decomposition, which may be caused by heat or combustion, will release oxygen which will increase the flammability range and burning rate of flammable vapors.	 <p>1 1 1 OX</p>
5.2	Extinguishing Methods:	Use water spray. DO NOT use dry chemical, CO <sub>2</sub> , foam or halogenated-type extinguishers. NOTE: Chemical extinguishing agents may accelerate decomposition.	
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. Fight fire upwind. 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 combustion or decomposition products and oxygen deficiencies.	

## 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: oil, paper towels, clothing) away from spill.</p> <p>For small spills (e.g., &lt; 1 gallon (3.8 L)) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. 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 large spills (e.g., ≥ 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 using non-sparking tools 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. 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. Wash 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. 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 the original container. Empty containers should be rinsed with water before discarding. Reseal container tightly to keep out moisture and other contaminants.
7.3	Special Precautions:	CAUTION: Mixing with other organic materials such as paper towels, clothing, especially if it is damp. MUST be avoided.

## 8. EXPOSURE CONTROLS & PERSONAL PROTECTION

[illegible]

## 9. PHYSICAL & CHEMICAL PROPERTIES

9.1	Appearance:	White powder
9.2	Odor:	Fresh odor
9.3	Odor Threshold:	NA
9.4	pH:	10.3 – 11.3
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:	0.65 – 0.98 g/ml
9.12	Solubility:	Soluble
9.13	Partition Coefficient (log Pow):	NA
9.14	Autoignition Temperature:	NA
9.15	Decomposition Temperature:	NA
9.16	Viscosity:	NA
9.17	Other Information:	NA

## 10. STABILITY & REACTIVITY

10.1	Stability:	This product is stable.
10.2	Hazardous Decomposition Products:	Reaction with organics and strong reducing agents may cause fire.
10.3	Hazardous Polymerization:	Will not occur.
10.4	Conditions to Avoid:	Excessive moisture, shock, friction.
10.5	Incompatible Substances:	Organic materials, strong reducing agents, powdered metals, strong bases, alcohols, phosphorous, anhydrides, halogens, acids.

## 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. However, technical data is available in scientific literature for the following components within this product, but is not presented in this document.		
11.3	Acute Toxicity:	See Section 4.4		
11.4	Chronic Toxicity:	See Section 4.5		
11.5	Suspected Carcinogen:	Talc: ACIGH A4 – Not classifiable as a human carcinogen. Resorcinol is not carcinogenic to humans, but is listed as Group 3 carcinogens by the IARC. Paraffinum Liquidum (Mineral Oil) is listed as IARC Group 1.		
11.6	Reproductive Toxicity:	This product is not reported to cause reproductive effects 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 is no specific data available for this product.
12.2	Effects on Plants & Animals:	There is no specific data available for this product.
12.3	Effects on Aquatic Life:	There is 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:	U.S. EPA RCRA Hazardous Waste Number: D001 (characteristic - ignitable)

# SAFETY DATA SHEET








Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, EU Standards

SDS Revision: 2.1

SDS Revision Date: 3/20/2021

## 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):	UN1479, OXIDIZING SOLID, N.O.S. (potassium persulfate), 5.1, III (LTD QTY, IP VOL ≤ 5.0 kg)	
14.2	IATA (AIR):	UN1479, OXIDIZING SOLID, N.O.S. (potassium persulfate), 5.1, III (LTD QTY, IP VOL ≤ 0.5 kg)	
14.3	IMDG (OCN):	UN1479, OXIDIZING SOLID, N.O.S. (potassium persulfate), 5.1, III (LTD QTY, IP VOL ≤ 5.0 kg)	
14.4	TDGR (CANADA):	UN1479, OXIDIZING SOLID, N.O.S. (potassium persulfate), 5.1, III (LTD QTY, IP VOL ≤ 5.0 kg)	
14.5	ADR/RID (EU):	UN1479, OXIDIZING SOLID, N.O.S. (potassium persulfate), 5.1, III (LTD QTY, IP VOL ≤ 5.0 kg)	
14.6	SCT (MEXICO):	UN1479, SOLIDO COMBURENTE, N.E.P. (persulfato de potasio), 5.1, III (CANT. LTDA., IP VOL ≤ 5.0 kg)	
14.7	ADGR (AUS):	UN1479, OXIDIZING SOLID, N.O.S. (potassium persulfate), 5.1, III (LTD QTY, IP VOL ≤ 5.0 kg)	

## 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):	<u>Ammonium Chloride</u> : 2270 kg (5000 lbs)
15.5	Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR subchapter G (Cosmetics). Ammonium Chloride is listed as a Hazardous Substance under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals 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 SDS 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 C, D2B (Oxidizing, Other Toxic Effects)
15.7	State Regulatory Information:	<u>Potassium Persulfate</u> is found on the following state criteria lists: FL, MA, NJ, PA. <u>Talc</u> is found on the following state criteria list: FL, MA, MN, NJ, PA and WA. <u>Paraffinum Liquidum (Mineral Oil)</u> is found on the following state criteria list: MA, MN and WA. 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). This product does not contain any chemicals known to the State of California to cause cancer or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> .
15.8	Other Requirements:	This product is found on the following inventory lists: Australia - AICS; China - IECSC; Europe - ELINCS/EINEC; Japan - ENCS; Korea - KECI; New Zealand - NZIoC; (Philippines - PICCS; USA - TSCA



## 16. OTHER INFORMATION

16.1	Other Information:	<p><b>DANGER! MAY INTENSIFY FIRE - OXIDISER. HARMFUL IF SWALLOWED. CAUSES SKIN IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. CAUSES SERIOUS EYE IRRITATION. MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED. MAY CAUSE RESPIRATORY IRRITATION.</b></p> <p>Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep/Store away from clothing/./combustible materials. Take any precaution to avoid mixing with combustibles. Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands and exposed skin areas with soap and warm water thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. In case of inadequate ventilation wear respiratory protection. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water.</p> <p><b>KEEP OUT OF REACH OF CHILDREN</b></p>	
16.2	Terms & Definitions:	See last page of this Safety Data Sheet.	
16.3	Disclaimer:	<p>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 &amp; Helias LLC knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness is 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.</p>	
16.4	Prepared for:	<p><b>Helias LLC</b> 17030 Ventura Blvd, Suite 200 Los Angeles, CA 91316 USA Tel: +1 (310) 437-4480 Fax: +1 (310) 437-4481 <a href="http://www.heliascosmetics.com">www.heliascosmetics.com</a></p>	 <p><b>OYA</b> OWN YOUR ART</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>	 <p><b>ShipMate</b> Dangerous Goods Training &amp; Consulting</p>



## 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
<b>RTECS No.</b>	Registry of Toxic Effects of Chemical Substances Number
<b>EINECS No.</b>	European Inventory of Existing Commercial Chemical Substances Number

### EXPOSURE LIMITS IN AIR:

<b>ACGIH</b>	American Conference on Governmental Industrial Hygienists
<b>IDLH</b>	Immediately Dangerous to Life and Health
<b>NOHSC</b>	National Occupational Health and Safety Commission (Australia)
<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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### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

#### HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard

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

#### PERSONAL PROTECTION RATINGS:

<b>A</b>	
<b>B</b>	
<b>C</b>	
<b>D</b>	
<b>E</b>	
<b>F</b>	

<b>G</b>	
<b>H</b>	
<b>I</b>	
<b>J</b>	
<b>K</b>	
<b>X</b>	Consult your supervisor or SOPs for special handling directions.

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

### OTHER STANDARD ABBREVIATIONS:

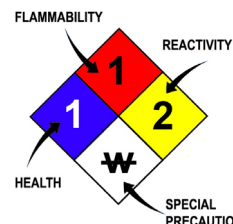
<b>Carc</b>	Carcinogenic
<b>Irrit</b>	Irritant
<b>NA</b>	Not Available
<b>NR</b>	No Results
<b>ND</b>	Not Determined
<b>NE</b>	Not Established
<b>NF</b>	Not Found
<b>SCBA</b>	Self-Contained Breathing Apparatus
<b>Sens</b>	Sensitization
<b>STOT RE</b>	Specific Target Organ Toxicity – Repeat Exposure
<b>STOT SE</b>	Specific Target Organ Toxicity – Single Exposure

### 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>10</sub>, LD<sub>10</sub>, &amp; LD<sub>50</sub> or TC, TC<sub>50</sub>, LC<sub>10</sub>, &amp; LC<sub>50</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>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)

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

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

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

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