

Page 1 of 6

BC-001 Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.1 SDS Revision Date: 11/29/2018 1. PRODUCT & COMPANY IDENTIFICATION BIRCHWOOD CASEY® SUPER BRIGHT™ TOUCH-UP SIGHT PENS 1 1 Product Name: 1.2 Chemical Name NA 1.3 Synonyms 15116 Trade Names: 1.4 Birchwood Casey® Super Bright™ Touch-Up Sight Pens Product Use: 1.5 Distributor's Name: 1.6 Birchwood Casey, LLC Distributor's Address: 3260 Winpark Drive, New Hope, MN., 55427 USA 1.7 1.8 Emergency Phone: ChemTrec +1 (800) 424-9300 / +1 (703) 527-3887 or Poison Control Center +1 (866) 291-7152 +1 (952) 388-6717 1.9 Business Phone / Fax: 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). DANGER! HIGHLY FLAMMABLE LIQUID AND VAPOR. MAYBE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SERIOUS EYE IRRITATION. MAY BE HARMFUL IN CONTACT WITH SKIN OR IF INHALED. MAY CAUSE CANCER. Classification: Asp. Tox. 1; Flam Liq. 2; Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Carc. 1B 2.2 Label Elements: Hazard Statements (H): H304 - May be fatal if swallowed and enters airways. H225 - Highly flammable liquid and vapor. H312+H332 - May be harmful in contact with skin or if inhaled. H319 - Causes serious eye irritation. H350 - May cause cancer. Precautionary Statements (P): P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking. P233 - Keep container tightly closed. P243 - Take action to prevent static discharge. P261 - Avoid breathing fume/vapor. P264 - Wash hands and exposed skin areas thoroughly with soap and warm water after handling. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves/ protective clothing/ eye protection. P301+P310 - IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P331 - Do not induce vomiting. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313 - If eye irritation persists: Get medical advice/attention. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P362+P364 - Take off contaminated clothing and was it before reuse. P312 - Call a POISON CENTER/doctor if you fell unwell. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. P321 - Specific treatment, see this container label and section 4 First Aid. P308+P313 - If exposed or concerned: Get medical advice/attention. P370+P378 - In case of fire: use CO2, Halon (if permitted), Dry Chemical, Foam, as 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) Other Warnings: WARNING! This product can expose you to chemicals including Ethylbenzene, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov. In the event of an exposure or medical inquiry involving this product, please contact a physician or local poison control center, who may seek advice from the U.S. manufacturer, and show them this SDS. KEEP OUT OF REACH OF CHILDREN. 3. COMPOSITION & INGREDIENT INFORMATION EXPOSURE LIMITS IN AIR (mg/m3)

					EXPOSORE LIMITS IN AIR (IIIg/III)			y/III <i>)</i>					
					AC	GIH		NOHSC			OSHA		
					pp	m		ppm			ppm		
							ES-	ES-	ES-				
CHEMICAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	TWA	STEL	PEAK	PEL	STEL	IDLH	OTHER
HYDROTREATED LIGHT	64742-88-7	WJ8930000	265-191-7	10-30	100	NF	NF	NF	NF	100	NA	NA	
DISTILLATE (MINERAL SPIRITS)	Asp. Tox. 1; H3	304											
VM & D SOLVENT	8032-32-4	OI6180000	232-453-7	10-30	300	400	NF	NF	NF	500	NA	3400	
VM & P SOLVENT	Flam. Liq. 2; Asp. Tox. 1; Carc. 1B; H225, H304, H350												
XYLENE	1330-20-7	ZE2100000	215-535-7	5-10	100	150	80	350	655	100	150	900	
ATLENE	Flam. Liq 3; Acute Tox. 4; Skin Irrit. 2; H226, H312+H332, H315												
ETHYL BENZENE	100-41-4	DA0700000	202-849-4	1-5	100	150	100	434	543	100	150	800	
EINTLBENZENE	Flam. Liq. 2; A	cute Tox. 4 *; H22	25, H332										
STODDARD SOLVENT 8052-41-3 WJ8925000 232-489-3 1-5 100 NA 790 NF NF 200	200	NA	20000	RESP FRAC									
BIRCHWOOD CASEY® COLOR	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
NEON GREEN/ FLAT WHITE/													
FLUORESCENT RED													



Page 2 of 6

BC-001

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.1 SDS Revision Date: 11/29/2018

			4. FIRST AID MEASURES							
4.1	First Aid:	Ingestion:	DO NOT INDUCE VOMITING. Contact the nearest Poisor number for assistance and instructions. Seek immediate	INDUCE VOMITING. Contact the nearest Poison Control Center or local emergency telephone or assistance and instructions. Seek immediate medical attention. Do not induce vomiting. If occurs spontaneously, keep victim's head lowered (forward) to reduce the risk of aspiration.						
		Eyes:	If product gets in the eyes, flush eyes thoroughly with cop holding eyelid(s) open to ensure complete flushing. Rin Remove contact lenses, if present and easy to do. Continue	ious amour se cautious	nts of water fo	or at least 15 r	minutes,			
		Skin:	If irritation occurs & product is on the skin, rinse thoroughly washing of the affected area with plenty of soap and water footwear and wash thoroughly before reuse. If irritation, reimmediately.	Remove dness or s	all contamina welling persis	ated clothing, in its, consult a p	ncluding hysician			
		Inhalation:	Remove victim to fresh air at once. Under extreme correspiration. Seek immediate medical attention.	onditions, it	f breathing s	stops, perform	artificia			
4.2	Effects of Exposure: Ingestion: Ingestion: If product is swallowed, may cause nausea, vomiting and/or diarrhea and central nerv depression. Eyes: Moderately irritating to the eyes. The vapor is discomforting to the eye. Symptoms of overex include redness, itching, irritation and watering. Skin: May be irritating to skin, especially after prolonged contact. The product can cause allergic si (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure. Vapors of this product may be moderately irritating to the nose, throat and other tissues of the system. Symptoms of overexposure can include coughing, wheezing, nasal congestion, a breathing. Inhalation of concentrated vapors can cause central nervous system depression.					s of overexpose allergic skin resues of the resugestion, and	eure may reactions spiratory difficulty			
			drowsiness, dizziness, headaches, nausea). Odor may girmay occur. The dried film of this product may become grinding.	ve some wa	arning of exp	osure, but odo	r fatigue			
4.3	Symptoms of Overexposure:	Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. Prolonged or repeated contact may result in defatting and drying of the skin which may result in dermatitis. Overexposure in eyes may cause redness, itching and watering. Symptoms of inhalation may be evidenced by headache, dizziness, nausea and symptoms of intoxication. In extreme cases, unconsciousness and death.					ay cause			
4.4	Acute Health Effects:	Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can caus drowsiness, dizziness, headaches and nausea.				n cause				
4.5	Chronic Health Effects:	The material may accentuate any pre-existing dermatitis condition. Inhalation of high concentration of this material ca cause central nervous system depression and may be associated with cardiac arythmias.					erial can			
4.6	Target Organs: Medical Conditions	Eyes, Skin, I	· ·	LICALTI	1					
7.7	Aggravated by Exposure:	Pre-existing dermatitis, other skin conditions, and disorders of the target organs (eyes, skin) or impaired kidney function may be more susceptible				3				
		to the effects	of this substance.				3			
				PHYSICAL HAZARDS PROTECTIVE EQUIPMENT			0			
				EYES	SKIN	LUNGS	В			
			5. FIREFIGHTING MEASURES	•	•					
5.1	Fire & Explosion Hazards:	DANGER!	HIGHLY FLAMMABLE LIQUID AND VAPOR! Keep aw	ay from he	eat, lit cigare	ettes,				
		sparks & ope	en flame. Keep container closed.				•			
5.2	Extinguishing Methods: Firefighting Procedures:	This product decompose source of igr First respon protective e	(if permitted), Dry Chemical, Foam, as authorized. is a Class IB flammable liquid. When involved in a fire, this to produce carbon oxides. Vapors of this product are heavie lition and flash back to a leaking or open container. ders should wear eye protection. Structural firefighters quipment. Use a water spray or fog to reduce or direct ctually extinguishing a fire involving this product.	r than air ar must wear	nd may travel SCBAs and	to a	0			
			6. ACCIDENTAL RELEASE MEASURE	S						
6.1	Spills:	Before clear Equipment.	ning any spill or leak, individuals involved in spill cleanul	o must we			/laximize			
		ventilation (o	pen doors and windows) and secure all sources of ignition. If				materia			



Page 3 of 6

BC-001

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.1 SDS Revision Date: 11/29/2018 7. HANDLING & STORAGE INFORMATION 7 1 Work & Hygiene Practices: Avoid prolonged contact with this material. Avoid breathing the vapors generated by this product. Use in a wellventilated location (e.g., local exhaust ventilation, fans). Wash exposed skin thoroughly with plenty of soap & water after using this product. If necessary, use a moisturizer after washing. Do not eat, drink, or smoke while handling this product. 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, open flames, sparks, and other possible sources of ignition. Keep away from incompatible materials listed in Section 10. Do not store in damaged or unmarked containers or storage devices. Keep containers securely closed when not in use. Open slowly on a level, stable surface. Empty containers may contain residual amounts of this product: therefore, empty containers should be handled with care. As a precaution against exposure to the eyes, nose, throat and face, this product should not be stored higher than waist level. Keep away from children at all times! Special Precautions Do not store where temperatures can exceed 50 °C (122 °F). Spilled material may present a slipping hazard if left unattended. Clean all spills promptly. 8. EXPOSURE CONTROLS & PERSONAL PROTECTION OTHER OSHA 8.1 Exposure Limits: ACGIH NOHSC ppm (mg/m³) F9. STEL STEL ES-TWA PEL STEL IDLH CHEMICAL NAME(S) TLV PEAK HYDROTREATED LIGHT 100 NF NF NF NF 100 NA NA DISTILLATE (MINERAL SPIRITS) VM & P SOLVENT NF NF 3400 300 400 NF 500 NA XYLENE 100 150 80 350 655 100 150 900 ETHYL BENZENE 100 150 100 434 543 100 150 800 STODDARD SOLVENT 790 100 NA NF NF 200 NA 20000 8 2 Ventilation & Engineering Use local or general exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the Controls: handling of this product. Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station). 8.3 Respiratory Protection: No special respiratory protection is required under typical circumstances of use or handling. instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR \$1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or 8.4 Eve Protection: Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling 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: 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: 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:	Color varies, liquid in 10 mL metal pen			
9.2	Odor:	Strong solvent			
9.3	Odor Threshold:	NA NA			
9.4	pH:	NA NA			
9.5	Melting Point/Freezing Point:	NA NA			
9.6	Initial Boiling Point/Boiling Range:	NA			
9.7	Flashpoint:	22.7 °C (73 °F), setaflash			
9.8	Upper/Lower Flammability Limits:	NA			
9.9	Vapor Pressure:	NA			
9.10	Vapor Density:	1.0192			
9.11	Relative Density:	NA			
9.12	Solubility:	NA			
9.13	Partition Coefficient (log Pow):	NA			
9.14	Autoignition Temperature:	NA			
9.15	Decomposition Temperature:	NA NA			
9.16	Viscosity:	NA NA			
9.17	Other Information:	% volatile by volume 65.38 +/- 2%			



Page 4 of 6 **BC-001**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.1 SDS Revision Date: 11/29/2018

		10. STABILITY & REACTIVITY					
10.1	Stability:						
10.1	Hazardous Decomposition	Relatively stable under ambient conditions when stored properly. If exposed to extremely high temperatures, products of thermal decomposition may inclu	do irritating vapors and toxic				
	Products:	gases (e.g., oxides of carbon & nitrogen).					
10.3	Hazardous Polymerization:	Will not occur.					
10.4	Conditions to Avoid:	Exposure or contact to extreme temperatures, incompatible chemicals, strong light sources, sparks, flame.					
10.5	Incompatible Substances:	Strong oxidizers, peroxides or strong acids. Heat, sparks, and flames.					
		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 toxicology data. Toxicology data, f	, , , ,				
11.2	TOXICITY Data.	available for some of the components of the product and is presented below: Xylene: LD ₅₀ (oral, rat) 4,300 mg/kg.	ound in scientific literature, is				
11.3	Acute Toxicity:	See Section 4.4					
11.4	Chronic Toxicity:	See Section 4.5					
11.5	Suspected Carcinogen:	This product contains <u>Xylene</u> , a Group 3 carcinogen by IARC. This product contains <u>Xyler</u> carcinogen, ACGIH A4. This product contains <u>Ethylbenzene</u> ,a Group 2B carcinogen by IA Group A3 by ACGIH.	RC. VM & P Solvent is listed				
11.6	Reproductive Toxicity:	This product is not reported to cause reproductive toxicity in humans. There is ample evembryotoxicity and fetotoxicity in mice and rats, but Xylene is not considered teratogenic.	idence that <u>Xylene</u> produces				
	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 4.2					
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; however, very large releases of this product to overexposed aquatic life.	oduct may be harmful or fatal				
		13. DISPOSAL CONSIDERATIONS					
13.1	Waste Disposal:	Review current local, state and federal laws, codes, statutes and regulations to determine of disposal method for the ingredients listed in Section 2. Any disposal practice must be in confederal laws and regulations. Contact the appropriate agency for specific information. Treadisposal of hazardous waste must be provided by a licensed facility or waste hauler.	npliance with local, state, and				
13.2	Special Considerations:	U.S. EPA Waste Number: D001 (characteristic - ignitable)					
		14. TRANSPORTATION INFORMATION					
The I	basic description (ID Numbe	r, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation.	Additional descriptive information				
		A/ICAO, IMDG and the CTDGR.					
14.1	49 CFR (GND):	UN1263, PAINT RELATED MATERIALS, 3, II, (LTD QTY, IP ≤ 1.0 L) or CONSUMER COMMODITY, ORM-D – until 01/01/2021					
14.2	IATA (AIR)*:	ID8000, CONSUMER COMMODITY, 9 (IP VOL ≤ 0.5 L) UN1263, PAINT RELATED MATERIALS, 3, II (LTD QTY, IP ≤ 1.0 L)	♦ ♥or ♦ ♥				
		UN1263, PAINT RELATED MATERIALS, 3, II, (LTD QTY, IP VOL ≤ 1.0 L)					
14.3	IMDG (OCN):	UN1263, PAINT RELATED MATERIALS, 3, II, (LTD QTY, IP VOL ≤ 1.0 L)	\Diamond				
14.3	IMDG (OCN): TDGR (Canadian GND):	UN1263, PAINT RELATED MATERIALS, 3, II, (LTD QTY, IP VOL ≤ 1.0 L) UN1263, PAINT, 3, II, (LTD QTY, IP VOL ≤ 1.0 L); or "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (≤ 1.0 L)	\$				
		UN1263, PAINT, 3, II, (LTD QTY, IP VOL ≤ 1.0 L); or	\langle				
14.4 14.5 14.6	TDGR (Canadian GND): ADR/RID (EU): SCT (MEXICO):	UN1263, PAINT, 3, II, (LTD QTY, IP VOL ≤ 1.0 L); or "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (≤ 1.0 L)	\$ \$ \$ \$ \$ \$ \$				
14.4	TDGR (Canadian GND): ADR/RID (EU):	UN1263, PAINT, 3, II, (LTD QTY, IP VOL ≤ 1.0 L); or "LIMITED QUANTITY" or "QUANTITÉ LIMITÉE" or "LTD QTY" or "QUANT LTÉE" (≤ 1.0 L) UN1263, PAINT RELATED MATERIALS, 3, II, (LTD QTY, IP VOL ≤ 1.0 L)	♦♦♦♦				



Page 5 of 6

BC-001

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision Date: 11/29/2018 SDS Revision: 2.1 15. REGULATORY INFORMATION SARA Reporting This product contains Xylene and Ethylbenzene, substances subject to SARA Title III, Section 313 reporting Requirements requirements 15.2 SARA TPO: 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. CERCLA Reportable Quantity: Xylene: 45.4 kg (100 lbs.); Ethylbenzene: 454 kg (1,000 lbs.) 15.4 Other Federal Requirements 15.5 NA 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/NDSL. None of the components of this product are listed on the Priorities Substances List. WHMIS Class B3 (combustible liquids). WHMIS Class D2B (material causing other toxic State Regulatory Information: Xylene is found on the following state criteria list: 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) and Wisconsin Hazardous Substances List (WI). Ethylbenzene is found on the following state criteria list: CA, FL, MA, MN, PA and WA. VM & P Solvent is found on the following state criteria list: PA and WA. Stoddard Solvent is found on the following state criteria list: FL, MA, MN, PA 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). WARNING! This product contains a chemical known to the state of California to cause cancer: Ethylbenzene. For more information go to www.P65Warnings.ca.gov Other Requirements: WARNING: This product can expose you to chemicals including Ethylbenzene, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov. 16. OTHER INFORMATION 16 1 Other Information: DANGER! HIGHLY FLAMMABLE LIQUID AND VAPOR. MAYBE FATAL IF SWALLOWED AND ENTERS AIRWAYS. CAUSES SERIOUS EYE IRRITATION. MAY BE HARMFUL IN CONTACT WITH SKIN OR IF INHALED. MAY CAUSE CANCER. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other sources of ignition. No smoking. Keep container tightly closed. Take action to prevent static discharge. Avoid breathing fume/vapor. Wash hands and exposed skin areas thoroughly with soap and warm water after handling. Use only outdoors or in a wellventilated area. Wear protective gloves/ protective clothing/ eye protection. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Do not induce vomiting. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Take off contaminated clothing and was it before reuse. Call a POISON CENTER/doctor if you fell unwell. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Specific treatment, see this container label and section 4 First Aid. If exposed or concerned: Get medical advice/attention. In case of fire: use CO2, Halon (if permitted), Dry Chemical, Foam, as authorized. Store in a well-ventilated place. Keep cool. Store locked up. KEEP LOCKED UP AND OUT OF REACH OF CHILDREN. WARNING: This product can expose you to chemicals including Ethylbenzene, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov. Terms & Definitions: 16.2 See last page of this Safety Data Sheet. Disclaimer: 16.3 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 & Birchwood Casey, 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. 16.4 Prepared for: Birchwood Casey, LLC 3260 Winpark Drive New Hope, MN 55427 USA Tel: +1 (952) 388-6717 Email: customerservice@birchwoodcasey.com http://www.birchwoodCasey.com 16.5 Prepared by: ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600

Training & Consulting

Fax: +1 (310) 370-5700

http://www.shipmate.com



Page 6 of 6 **BC-001**

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 2.1 SDS Revision Date: 11/29/2018

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:

CAS No.	Chemical Abstract Service Number					
RTECS No. Registry of Toxic Effects of Chemical Substances Number						
EINECS No.	European Inventory of Existing Commercial Chemical Substances Number					

EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists				
IDLH	Immediately Dangerous to Life and Health				
NOHSC	National Occupational Health and Safety Commission (Australia)				
OSHA	U.S. Occupational Safety and Health Administration				
PEL	Permissible Exposure Limit				
STEL	FL Short Term Exposure Limit				
TLV Threshold Limit Value					
TWA	Time Weighted Average				

FIRST AID MEASURES:

CPR	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.

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

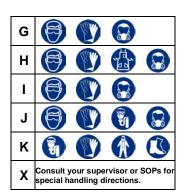
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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



PERSONAL PROTECTION RATINGS:

Α			
В			
С		THE STATE OF THE S	
D		THE STATE OF THE S	
Ε			
F		H,	





OTHER STANDARD ABBREVIATIONS:

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

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:				
Autoignition	Minimum temperature required to initiate combustion in air with no other source			
Temperature	of ignition			
LEL	Lower Explosive Limit - lowest percent of vapor in air, by volume, that will			
	explode or ignite in the presence of an ignition source			
UEL	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:

0	Minimal Hazard	FLAMMABILITY
1	Slight Hazard	\ \
2	Moderate Hazard	REACTIVITY
3	Severe Hazard	
4	Extreme Hazard	
ACD	Acidic	
ALK	Alkaline	
COR	Corrosive	/ X W Y
₩	Use No Water	HEALTH
OX	Oxidizer	SPECIAL
TREFOIL	Radioactive	PRECAUTIONS

TOXICOLOGICAL INFORMATION:

LD ₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals			
LC ₅₀	Lethal concentration (gases) which kills 50% of the exposed animal			
ppm Concentration expressed in parts of material per million parts				
TD _{io} Lowest dose to cause a symptom				
TCLo				
TD _{io} , LD _{io} , & LD _o or	D _o or Lowest dose (or concentration) to cause lethal or toxic effects			
TC, TCo, LCio, & LCo				
IARC	International Agency for Research on Cancer			
NTP	National Toxicology Program			
RTECS	Registry of Toxic Effects of Chemical Substances			
BCF	Bioconcentration Factor			
TLm	Median threshold limit			
log Kow or log Koc	Coefficient of Oil/Water Distribution			

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System			
DOT	U.S. Department of Transportation			
TC	Transport Canada			
EPA	U.S. Environmental Protection Agency			
DSL	Canadian Domestic Substance List			
NDSL	Canadian Non-Domestic Substance List			
PSL	PSL Canadian Priority Substances List			
TSCA	TSCA U.S. Toxic Substance Control Act			
EU	European Union (European Union Directive 67/548/EEC)			
WGK	Wassergefährdungsklassen (German Water Hazard Class)			

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

0	(*)	(2)		\odot	(4)		
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:

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