

SAFETY DATA SHEET

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards

SDS Revision: 3.2

SDS Revision Date: 8/2/2023

		1	PRODUC	T & COI	MDANY	IDE	NTII	FICΔT	ION				
1.1	Product Name:	1	TWRITER ¹						_	:W10	0L)		
1.2	Chemical Name:	NA							(1 /11 4		<u> </u>		
1.3	Synonyms:		™; PN CW100L										
1.4	Trade Names:		er™ PART NOS										
		on outtimes		•									
			/100P Pen (4 gr /100L-4 (125 gra		Part No. Ra Part No. C\								0L-4 (125 g); 0L-32 (1000 g)
1.5	Product Uses & Restrictions:	Silver Condu	ıctive Ink										
1.6	Distributor's Name:	CAIG Labora											
1.7	Distributor's Address:		her Court, Powa	av. CA 92064	-6876 USA								
1.8	Emergency Phone:	1	EC: +1 (703)				-930	0 (CCN	1205206	3			
1.9	Business Phone / Fax:	+1 (800) 224		021 0001	7 - 1 (000	,		0 (00.	1200200	,			
		1 (000) 22 1											
	.			AZARDS								•	
2.1	Hazard Identification:	according to WARNING!	t is classified as the classificatio CAUSES EYE n: Eye Irrit 2; Sk	n criteria of N IRRITATION	NOHSC: 10	88 (200)4) and	d ADG C	ode (Aust	ralia).			
2.2	Label Elements:	Hazard State Precautionar thoroughly a plenty of wa P305+P351+ lenses, if pre medical advi off contamir	ements (H): H19 ry Statements (fter handling. F ater. P333+P3 +P338 – IF IN E esent and easy ice/attention. P nated clothing a	9 – Causes ey (P): P261 – P280 – Wear B13 – If skir YES: Rinse of to do. Con 321 – Specif and was it b	Avoid breamont for tritation of the cautiously within the cautiously within the cautious of the cautious of the cautious of the caution of th	athing gloves. or rash rith wat g. P33 t see tl e. P5	dust/r P302 n occuer for s 7+P32 his cor	mist/vapo 2+P352 - urs get i several r 13 – If e ntainer la	or/spray IF ON SI medical a minutes. F ye irritatio abel. P362	P264 – KIN: Wa dvice/att Remove n persis 2+P364	Wash sh with tention. contact its: Get – Take	•	!
			tment, storage a		facility (TSI	DF).							
2.3	Other Warnings:	KEEP OUT	OF REACH OF	CHILDREN.									
		3. C	<u>OMPOSIT</u>	ION & IN	IGREDI	ENT	INF	ORM	<u>ATION</u>				
									EXPOSURE			n³)	
							GIH	+	OHSC		OSHA		
						PI	om		ppm ES- ES-		ppm		
CHEMI	CAL NAME(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL		STEL PEAK	PEL	STEL II	DLH	OTHER
SILVE	D	7440-22-4	VW350000	231-131-3	45-55	0.1	NA	0.01	NF NF	NA	NA	10 C	UST
OILVL			T	1				T I.				1	
DIMET	THY GLUTARATE	1119-40-0	NA	214-277-2	25-45	NA	NA	NF N	IF NF	NA	NA	NA	
		78-93-3	EL6475000	201-159-0	10-15	200	300	150	445 NF	200	300 3	000	
METH	YL ETHYL KETONE	Flam. Liq. 2;	Eye Irrit. 2; STOT	SE 3; H225, H	1319, H336								
DIME	THYL SUCCINATE	106-65-0	WM6765000	203-419-9	5-10	NA	NA	NF N	IF NF	NA	NA	NA	
DIIVIL		627-93-0	AV1645000	211-020-6	5-10	NA	NA	NF N	IF NF	NA	NA	NA	
DIME	THYL ADIPATE	027-95-0	[AV 1043000	211-020-0	10-10	INA	INA	I INI IIV	II INI	INA	INA	INA	
DDODDIETA DV DECINO		NA	NA	NA	0-5	NA	NA	NF N	IF NF	NA	NA	NA	
PROP	RIETARY RESINS										•		
			4.	FIRST A	AID MEA	ASU	RES	;					
4.1	Ingestion: Ingestion: Ingestion: If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide estimate of the time at which the material was ingested and the amount of the substance that swallowed. Eyes: Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukew water for at least 15 minutes lifting upper and lower lids, occasionally.			er or milk to an per. Provide an tance that was ts of lukewarm									
		Skin: Inhalation:	Wash thoroug least 15 minut Remove victin	es.						-			y of water for at ps give
L			artificial respira									_	
	•	•	'			ı		-					



7.2

7.3

Storage & Handling:

Special Precautions:

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision Date: 8/2/2023 4. FIRST AID MEASURES - cont'd 42 Effects of Exposure: Ingestion: If product is swallowed, may cause nausea, vomiting and/or diarrhea. Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and Eyes: Skin: May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some sensitive individuals. Inhalation: None expected. 4.3 Symptoms of Overexposure: Nausea, intestinal discomfort, vomiting and/or diarrhea. Ingestion: Eyes: Overexposure in eyes may cause redness, itching and watering. Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. Frostbite Skin: like symptoms. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in some individuals. 4.4 Acute Health Effects Non-irritating when used as directed. Moderate irritation to eyes and skin near affected areas. Additionally, high concentrations of vapors can cause drowsiness, dizziness, headaches and nausea. 4.5 Chronic Health Effects: Non-irritating when used as directed. Overexposure may trigger asthma-like symptoms in some sensitive individuals. May also induce skin sensitization and respiratory hypersensitivity. Possible allergic dermatitis. 4.6 Target Organs: Eyes, Skin. 4.7 Medical Conditions Pre-existing dermatitis, other skin conditions, and disorders of the HEALTH 1 Aggravated by Exposure: target organs (eyes, skin, and respiratory system). **FLAMMABILITY** 1 PHYSICAL HAZARDS 0 PROTECTIVE EQUIPMENT В **EYES** SKIN 5. FIREFIGHTING MEASURES Fire & Explosion Hazards: This product is not flammable. However, if involved in a fire, this product may decompose at high temperatures to form toxic gases (e.g., CO,CO_x). 52 Extinguishing Methods: Water, Foam, CO2, Dry Chemical, Halon (if permitted). Use water spray to cool unopened containers. 5.3 Firefighting Procedures: Fight fires as for surrounding materials. 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 personal. Fight fire upwind. Avoid spraying water directly into storage containers because of danger of boil-over. 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 Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. Plastic or rubber gloves, respirator, eye protection and apron may be required for clean-up of large spills. Small Spills: Wear appropriate protective equipment including gloves and protective eyewear. Use a non-combustible material such as vermiculite or sand to soak up the product and place into a container for later disposal. Do not use water or a material such as "speedy dry" to soak up material. Sweep up material using non-sparking materials (e.g., plastic brooms, shovels, dustpans) and place into a plastic container or plastic liner within another container. Large Spills: Keep incompatible materials (e.g., organics such as oil) away from spill. Stay upwind and away from spill or release. Isolate immediate hazard area and keep unauthorized personnel out of area. Stop spill or release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant. 7. HANDLING & STORAGE INFORMATION 7.1 Work & Hygiene Practices: Do not eat, drink or smoke when handling this product. Contents under pressure. Handle as to avoid puncturing container(s). When used as intended, no additional protective equipment is necessary. Use chemical goggles if eye

contact is possible. Wash unintentional residues with soap and warm water.

damage. To avoid unintentional spraying keep cap in place when not in use.

Clean all spills promptly. Spilled material may present a slipping hazard.

Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans) away from heat and direct sunlight. Avoid temperatures above 120 °F. Keep away from incompatible substances. Protect containers from physical



11.6

Reproductive Toxicity:

Reproductive Toxicity:

Mutagenicity

Embryotoxicity:

Teratogenicity:

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This product is not reported to produce reproductive toxicity in humans.

This product is not reported to produce embryotoxic effects in humans.

This product is not reported to produce mutagenic effects in humans

This product is not reported to cause teratogenic effects in humans.

This product is not reported to cause reproductive effects in humans.



Other Requirements:

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, 2001/58 & 1272/2008/EC Standards SDS Revision Date: 8/2/2023 11. TOXICOLOGICAL INFORMATION - cont'd 11.7 Irritancy of Product: The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure. 11.8 Biological Exposure Indices: 11.9 Physician Recommendations: Treat symptomatically 12. ECOLOGICAL INFORMATION 12.1 Environmental Stability: There is no specific data available for this product. Effects on Plants & Animals: 12.2 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 may be harmful or fatal to overexposed aquatic life. 13. DISPOSAL CONSIDERATIONS Products covered by this MSDS, in their original form, when disposed as waste, are considered non hazardous waste 13.1 Waste Disposal: according to Federal RCRA regulations (40 CFR 261). Disposal should be in accordance with local, state and federal regulations. Dispose of in accordance with federal, state and local regulations. 13.2 Special Considerations: The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state, federal and provincial regulations. 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): NOT REGULATED 14.2 IATA (AIR): **NOT REGULATED** 14.3 IMDG (OCN): **NOT REGULATED** TDGR (Canadian GND): 14.4 **NOT REGULATED** 14.5 ADR/RID (EU): **NOT REGULATED** SCT (MEXICO): 14.6 **NOT REGULATED** 14.7 ADGR (AUS): **NOT REGULATED** 15. REGULATORY INFORMATION SARA Reporting This product contains Silver a substance subject to SARA Title III, section 313 reporting requirements. Requirements 15.2 SARA Threshold Planning There are no specific Threshold Planning Quantities for the components of this product. Quantity TSCA Inventory Status: 15.3 The components of this product are listed on the TSCA Inventory CERCLA Reportable Quantity 15.4 Silver: 454 kg (1,000 lbs.); Methyl Ethyl Ketone: 2,270 kg (5,000 lbs) (RQ): 15.5 Other Federal Requirements: This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR Subchapter G, (Cosmetics) 15.6 Other Canadian Regulations: This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List. Silver is found on the following state criteria list: Florida Toxic Substances List (FL), Massachusetts Hazardous 15.7 State Regulatory Information: 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). Methyl Ethyl Ketone is listed on the following state criteria lists: MA, 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

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 www.P65Warnings.ca.gov

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		16. OTHER INFORMATION
16.1	Other Information:	WARNING! CAUSES EYE IRRITATION. MAY CAUSE AN ALLERGIC SKIN REACTION. Use only as directed. Avoid contact with skin. Avoid contact with eyes. Wear suitable protective clothing/gloves. Avoid breathing dust/mist/vapor/spray. Wash thoroughly after handling. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs get medical advice/attention. 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. Specific treatment see this container label. Take off contaminated clothing and was it before reuse. KEEP LOCKED UP AND OUT OF REACH OF CHILDREN.
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 & CAIG Laboratories, Inc.'s 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:	CAIG Laboratories, Inc. 12200 Thatcher Court Poway, CA 92064-6876 Tel: +1 (800) CAIG-123 (244-4123) Fax: +1 (858) 486-8398 fax http://www.caig.com/
16.5	Prepared by:	ShipMate, Inc. P.O. Box 787 Sisters, Oregon 97759-0787 USA Tel: +1 (310) 370-3600 Fax: +1 (310) 370-5700 http://www.shipmate.com

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SDS Revision: 1.0

SDS Revision Date: 8/2/2023

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.	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	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 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

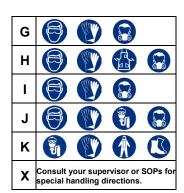
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

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



PERSONAL PROTECTION RATINGS:

Α			
В			
С	ELA	THE STATE OF THE S	
D	ELA	THE NAME OF THE PERSON OF THE	
Ε	ELA		
F	(Eller)	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	Sens Sensitization		
STOT RE	STOT RE Specific Target Organ Toxicity – Repeat Exposure		
STOT SE	STOT SE Specific Target Organ Toxicity – Single Exposure		

NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:				
Autoignition Temperature	Minimum temperature required to initiate combustion in air with no other source 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	/ ~~~~	
W	Use No Water	HEALTH 💉	
ОХ	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	Lowest concentration to cause a symptom
TD _{Io} , LD _{Io} , & LD _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	DSL Canadian Domestic Substance List		
NDSL	NDSL Canadian Non-Domestic Substance List		
PSL	PSL Canadian Priority Substances List		
TSCA	TSCA U.S. Toxic Substance Control Act		
EU	EU European Union (European Union Directive 67/548/EEC)		
WGK	GK Wassergefährdungsklassen (German Water Hazard Class)		

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

0	((2)		\odot	(49)		
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:

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