

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

MATERIAL SAFETY DATA SHEET

MSDS Revision: 2.1

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MSDS-E-D100L-WIPES

MSDS Revision Date: 02/14/2011

03 **CHEMICAL RESPONSE CARD:** 1. PRODUCT IDENTIFICATION 1.1 Product Name: DeoxIT® Wipes, D-SERIES RESPONSE **TEAM PPE:** 1.2 Chemical Name See ingredients listed in section 3 1.3 Synonyms: DeoxIT® D100L WHMIS: 1 4 Trade Names: DeoxIT® D100L (see list below) 1.5 Product Use: Clean, deoxidize & improve electrical contacts & connectors **HEALTH:** 0 1.6 Manufacturer's Name: CAIG Laboratories, Inc. FLAMMABILITY: 0 1.7 Manufacturer's Address 12200 Thatcher Court, Poway, CA 92064-6876 PHYSICAL HAZARDS 0 1.8 Business Phone: PERSONAL PROTECTION: +1 (800)-224-4123 1.9 **Emergency Phone:** CHEMTREC +1 (703) 527-3887 / +1 (800) 424-9300 Other Product Names: DeoxIT® WIPES, (Part Nos. D50W, K-D1W-25, K-D1W-50, D1W) 2. HAZARD IDENTIFICATION Hazard Identification 2.1 This product is NOT classified as a HAZARDOUS SUBSTANCE or as DANGEROUS GOODS according to the classification criteria of [NOHSC: 1088 (2004)] and ADG Code (Australia). DeoxIT® D100L is non-volatile, non-hazardous and non-flammable. Routes of Entry: YES YES YES Inhalation: Absorption: Ingestion: Effects of Exposure: 23 EYES: Non-irritating when used as directed. Can cause irritation, tearing, and temporary blurred vision. SKIN: Non-irritating when used as directed. Prolonged or repeated contact may cause temporary contact dermatitis (localized redness or rash). INGESTION: Not probable. Small amounts if swallowed may cause temporary gastrointestinal irritation. INHALATION: Unlikely route of exposure. Should vapor concentrations exceed recommended exposure levels, they are temporary irritating to the eyes, nose, throat, and the respiratory tract; may cause temporary headaches and dizziness. 24 Symptoms of Overexposure Non-irritating when used as directed. Can cause temporary irritation, tearing, and blurred vision. EYES: SKIN: Non-irritating when used as directed. Prolonged or repeated contact may cause temporary contact dermatitis (localized redness or rash). INGESTION: Not probable. Small amounts if swallowed may cause temporary gastrointestinal irritation. INHALATION: Unlikely route of exposure. Should vapor concentrations exceed recommended exposure levels, they are temporary irritating to the eyes, nose, throat, and the respiratory tract; may cause headaches and dizziness. Acute Health Effects: 2.5 EYES: None reported when used as directed. Mild to moderate temporary irritation. SKIN: Unlikely when used as directed. Repeated exposure at site of contact may cause temporary contact dermatitis (localized redness or rash). INGESTION: Not probable. Small amount may cause temporary gastrointestinal irritation and central nervous system depression. INHALATION: Unlikely route of exposure. Should vapor concentrations exceed recommended exposure levels, they are temporary irritating to the eyes, nose, throat, and the respiratory tract; may cause headaches and dizziness. 2.6 Chronic Health Effects: None reported by the manufacturer. 2.7 Target Organs: Eyes and skin. NA = Not Available; ND = Not Determined; NE = Not Established; NF = Not found; C = Ceiling Limit; See Section 16 for Additional Definitions of Terms Used NOTE: all WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1998 format



equipment.

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Ventilate if in enclosed area. Secure spill area, remove or minimize all sources of ignition, and maximize ventilation. Wipe and rinse with water. Deny entry to all unprotected individuals. Individuals involved in the cleanup must wear appropriate personal protective



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Prepared to OSHA, ACC, ANSI, WHMIS, NOHSC & 2001/58 EC Standards MSDS Revision: 2.1 MSDS Revision Date: 02/14/2011 7. HANDLING & STORAGE INFORMATION 7.1 Work & Hygiene Practices: Wash hands thoroughly after using this product and before eating, drinking, or smoking. Remove soiled clothing to prevent prolonged skin contact. Storage & Handling: Use and store in a cool, dry, well-ventilated area. Do not store near or with any incompatible materials listed in section 10. Open containers may change concentrations, keep tightly closed when not in use. Normal shelf life 2-3 years. 7.3 Empty containers may contain product residues. 8. EXPOSURE CONTROLS & PERSONAL PROTECTION 8.1 Ventilation & Engineering Controls: Use with adequate ventilation (e.g., open doors and windows, local exhaust ventilation). Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station). Respiratory Protection: 8.2 None required, when used with adequate ventilation. 8.3 Wear safety glasses with side shields (ANSI Z87) under normal use conditions. 8.4 None required under normal conditions of use. However, may cause skin irritation in some sensitive individuals. In such cases, wear rubber or impervious plastic gloves. 8.5 Body Protection: Use as necessary to prevent skin contact. 9. PHYSICAL & CHEMICAL PROPERTIES 9 1 Density: 0.72 Boiling Point: 9.2 > 220 °C (428 °F) 9.3 Melting Point NA 9 4 Evaporation Rate: NA 9.5 Vapor Pressure < 0.01 mm Hg @ 20 °C (68 °F) 9.6 Molecular Weight: 9.7 Appearance & Color: Light red 9.8 Odor Threshold: Ethereal/hydrocarbon odor 9.9 Solubility Not soluble in water 9.10 Ph 9.11 Viscosity: 5.4 - 7.5 cSt @ 104 °F 9.12 VOC (g/L): None 9 13 Other Information: NA 10. STABILITY & REACTIVITY 10.1 Stability: Stable under normal conditions of use (see section 7). 10.2 Hazardous Decomposition Products: Change in color signifies exposure to ultraviolet light or exceeding shelf life. Will not degrade to unstable products. Discard solution. 10.3 Hazardous Polymerization: 10.4 Conditions to Avoid: Use or storage near open flames, sparks, high heat (>100 °F) or other heat sources, and proximity to incompatible substances and heavily trafficked areas. 10.5 Incompatible Substances: Strong oxidizers.



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		11. TOXICOLOGICAL INFORMATION							
11.1	Toxicity Data:								
11.1	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. These data have not								
		been presented in this document.							
11.2	Acute Toxicity:	See section 3.5							
11.3	Chronic Toxicity:	See section 3.6							
11.4	Suspected Carcinogen:	NE							
11.5	Reproductive Toxicity:								
11.5	Mutagenicity:	This product is not reported to produce reproductive toxicity in humans. 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 produce teratogenic effects in humans.							
	Reproductive Toxicity:	This product is not reported to produce reproductive effects in humans.							
11.6	Irritancy of Product:	See Section 3.3							
11.7	Biological Exposure Indices:	NE							
11.8	Physician Recommendations:	Treat symptomatically.							
	•								
		12. ECOLOGICAL INFORMATION							
12.1	Environmental Stability:	This product will slowly volatile from soil. Components of this product will slowly decompose into							
		organic compounds.							
12.2	Effects on Plants & Animals:	There is no specific data available for this product.							
12.3	Releases of large volumes of this product are expected to be harmful or fatal to overexposed aquatic life.								
		13. DISPOSAL CONSIDERATIONS							
13.1	Waste Disposal: Dispose of in accordance w	vith federal, state or local regulations.							
13.2	Special Considerations:	miniousial, state of local oguidations.							
	NA								
		14. TRANSPORTATION INFORMATION							
		r, proper shipping name, hazard class & division, packing group) is shown for each mode of transportation. In may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.							
14.1	49 CFR (GND):	Thiay be required by 49 Cr k, IATA/ICAO, INIDO and the Crbok.							
	NOT REGULATED								
14.2	IATA (AIR):								
	NOT REGULATED								
14.3	IMDG (OCN): NOT REGULATED								
14.4	TDGR (Canadian GND):								
	NOT REGULATED								
14.5	ADR/RID (EU):								
	NOT REGULATED								
14.6	SCT (MEXICO):								
147	NO REGULADO ADGR (AUS):								
14.7	NOT REGULATED								



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Prepared to OSHA, ACC, ANSI, WHMIS, NOHSC & 2001/58 EC Standards MSDS Revision Date: 02/14/2011 MSDS Revision: 2.1 15. REGULATORY INFORMATION 15.1 SARA Reporting Requirements: 15.2 SARA Threshold Planning Quantity NA 15.3 TSCA Inventory Status: All chemical substances of this product are listed on the TSCA inventory or are otherwise exempt from inventory status. 15.4 CERCLA Reportable Quantity (RQ) 15.5 Other Federal Requirements: NA 15.6 Other Canadian Regulations This product has been classified according to the hazard criteria of the Controlled Products Regulations (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. 15.7 State Regulatory Information: The primary component of this product is not listed on the following state lists: California OSHA; California Proposition 65; Massachusetts Right to Know List of Chemicals; New Jersey Right to Know List 8:59 Appendix A; Pennsylvania Hazardous Substances List 34 323 Appendix A; Wisconsin Hazardous Substances List NR 605.09; Minnesota Hazardous Substances List; and Florida Toxic Substances List. 15.8 67/548/EEC (European Union) Requirements: The primary component of this product is not listed in Annex I of EU Directive 67/548/EEC. 16. OTHER INFORMATION 16.1 Other Information: NΑ 16.2 Terms & Definitions: See page last page of this MSDS. 16.3 Disclaimer: This Material 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 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. Prepared for: 16.4 CAIG Laboratories, Inc. 12200 Thatcher Court Poway, CA 92064-6876 +1 (800) CAIG-123 (244-4123) phone +1 (858) 486-8398 fax http://www.caig.com/ Prepared by: ShipMate, Inc. P.O. Box 787 Sisters, OR, 97759-0787 +1 (310) 370-3600 phone +1 (310) 370-5700 fax http://www.shipmate.com/



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DEFINITION OF TERMS

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

GENERAL INFORMATION:

CAS No.	Chemical Abstract Service Number

EXPOSURE LIMITS IN AIR:

ACGIH American Conference on Governmental Industrial Hygieni	
TLV Threshold Limit Value	
OSHA U.S. Occupational Safety and Health Administration	
PEL Permissible Exposure Limit	
IDLH Immediately Dangerous to Life and Health	

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:

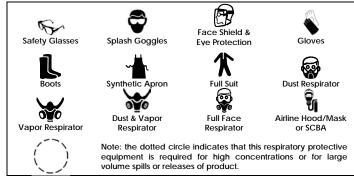
0	Minimal Hazard	
1	1 Slight Hazard	
2	2 Moderate Hazard	
3 Severe Hazard		
4	Extreme Hazard	



PERSONAL PROTECTION RATINGS:

Α	\$			
В	B	The second		
С	S		*	
D			*	
E	S	The state of the s		
F	8		*	





OTHER STANDARD ABBREVIATIONS:

NA	Not Available		
NR	No Results		
NE Not Established			
ND	Not Determined		
ML	Maximum Limit		
SCBA Self-Contained Breathing Apparatus			

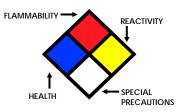
NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

FLAMMABILITY LIMITS IN AIR:

Autoignition	Minimum temperature required to initiate combustion			
Temperature	in air with no other source of ignition			
LEL Lower Explosive Limit - lowest percent of vapor in air,				
	volume, that will explode or ignite in the presence			
	an ignition source			
UEL	Upper Explosive Limit - highest percent of vapor in air,			
	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		
1	Slight Hazard		
2	Moderate Hazard		
3	Severe Hazard		
4	Extreme Hazard		
ACD	Acidic		
ALK	Alkaline		
COR	Corrosive		
w —	Use No Water		
ОХ	Oxidizer		



TOXICOLOGICAL INFORMATION:

LD ₅₀	Lethal Dose (solids & liquids) which kills 50% of the exposed animals s			
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, LClo, & 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 K _{ow} or log K _{oc}	Coefficient of Oil/Water Distribution			

REGULATORY INFORMATION:

WHMIS	Canadian Workplace Hazardous Material Information System		
DOT	OT 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 Canadian Priority Substances List			
TSCA U.S. Toxic Substance Control Act			
EU European Union (European Union Directive 67/548/EEC)			

EC INFORMATION:

		*	*			×	×
С	E	F	N	0	T+	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful