

Page 1 of 5 SDS-E-S100L

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 5.0 SDS Revision Date: 2/1/2018

| 1.1 | Product Name: | DEOXIT® SHIELD S-SERIES, 100% Solution, 0% VOC (P/N S100L) |
|-------|---------------------------|---|
| 1.2 | Chemical Name: | |
| 1.2 | | NG |
| 1.4 | Synonyms: Trade Names: | DeoxIT® Shield S-Series; PN S100L DeoxIT® Shield S100L Part Numbers: |
| 1.4 | Trade Names: | Part No. S100L-2C, S100L-2CP, S100L-B2C, S100L-CPK (2 ml); |
| | | Part No. S100L-28D (2.3 ml); Part No. S100L-2DB (7.4 ml); Part No. S100L-12C (12 ml); |
| | | Part No. S100L-25C (25 ml); Part No. S100P (6 ml); Part No. S100L-P6C (6 ml); |
| | | Part No. S1W (single wipe) Part No. S50W (50 wipes); Part No. S100L-2 (59 ml); |
| | | Part No. S100L-8 (236 ml); Part No. S100L-12 (354 ml); Part No. S100L-13 (384 ml); |
| | | Part No. S100L-13HPE (384 ml); Part No. S100L-16 (472 ml); Part No. S100L-32 (944 ml); |
| _ | | Part No. S100L-8G (30 L); Part No. S100L-55G (55 gal) |
| 1.5 | Product Use: | Lubricant and Protectant for electronic contacts & connectors |
| .6 | Distributor's Name: | CAIG Laboratories, Inc. |
| l.7 | Distributor's Address: | 12200 Thatcher Court, Poway, CA 92064-6876 USA |
| | Emergency Phone: | CHEMTREC: +1 (703) 527-3887 / +1 (800) 424-9300 (CCN205206) |
| 1.9 | Business Phone / Fax: | +1 (800) 224-4123 |
| | | 2. HAZARDS IDENTIFICATION |
| 2.1 | Hazard Identification: | This product is classified as a HAZARDOUS SUBSTANCE but NOT as DANGEROUS GOODS according to the |
| | | classification criteria of NOHSC: 1088 (2004) and ADG Code (Australia). DeoxIT® 100% solution is non-volatile an |
| | | non-flammable. |
| | | WARNING! CAUSES EYE IRRITATION. |
| | | Classification: Eye Irritant 2B |
| 2.2 | Label Elements: | Hazard Statements (H): H320 – Causes eye irritation. |
| | | Precautionary Statements (P): P264 – Wash thoroughly after handling. 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. |
| 2.3 | Other Warnings: | KEEP OUT OF REACH OF CHILDREN |
| | | |
| | | 3. COMPOSITION & INGREDIENT INFORMATION |
| | | EXPOSURE LIMITS IN AIR (mg/m³) |
| | | ACGIH NOHSC OSHA |
| | | ppm ppm ppm |
| HEMIC | CAL NAME(S) | CAS No. RTECS No. EINECS No. % TLV STEL TWA STEL PEAK PEL STEL IDLH OTHER |
| | T® SHIELD S-SERIES | NA NA NA 100 NA NA NF NF NA NA NA |
| 100L | - | REACH Reg. No. Non-Hazardous/Proprietary |
| | | |
| | | 4. FIRST AID MEASURES |
| 4.1 | First Aid: | Ingestion: If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or mi |
| | | IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give water or milk to a unconscious person. Contact the nearest Poison Control Center or local emergency number. Provide a |
| | | estimate of the time at which the material was ingested and the amount of the substance that was |
| | | swallowed. |
| | | Eyes: Splashes are not likely; however, if product gets in the eyes, flush with copious amounts of lukewarm water for |
| | | least 15 minutes lifting upper and lower lids, occasionally. |
| | | Skin: Wash thoroughly with soap and water. In case of contact, immediately flush skin with plenty of water for at least |
| | | 15 minutes. |
| | | Inhalation: Remove victim to fresh air at once. If breathing difficult, administer oxygen. If breathing stops give artificial respiration. Keep person warm, quiet and get medical attention. |
| 1.2 | Effects of Exposure: | Ingestion: If product is swallowed, may cause nausea, vomiting and/or diarrhea. |
| | · | Eyes: Moderately irritating to the eyes. Symptoms of overexposure may include redness, itching, irritation and watering |
| | | Skin: May be irritating to skin. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in som |
| | | sensitive individuals. |
| _ | | Inhalation: None expected. |
| 1.3 | Symptoms of Overexposure: | Ingestion: Nausea, intestinal discomfort, vomiting and/or diarrhea. |
| | | Eyes: Overexposure in eyes may cause redness, itching and watering. |
| | | Skin: Symptoms of skin overexposure may include redness, itching, and irritation of affected areas. Frostbite lil |
| | | |
| | | symptoms. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in son |
| 1.4 | Acute Health Effects: | symptoms. The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) in son individuals. Non-irritating when used as directed. Moderate irritation to eyes and skin near affected areas. Additionally, high |



Page 2 of 5

SDS-E-S100L

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 5.0 SDS Revision Date: 2/1/2018 4. FIRST AID MEASURES - cont'd 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). **FLAMMABILITY** 0 PHYSICAL HAZARDS 0 PROTECTIVE EQUIPMENT В SKIN **EYES** 5. FIREFIGHTING MEASURES 5.1 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). Extinguishing Methods: Water, Foam, CO₂, Dry Chemical. 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 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. 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. Storage & Handling: 7.2 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 damage 7.3 Special Precautions: Clean all spills promptly. Spilled material may present a slipping hazard. **EXPOSURE CONTROLS & PERSONAL PROTECTION** Exposure Limits: ACGIH NOHSC OSHA OTHER ppm (mg/m³) STEL CHEMICAL NAME(S) TLV STEL ES-TWA STEL PEAK PEL IDLH NA NA NA NA NA 8 2 Ventilation & Engineering General mechanical (e.g., fans) or natural ventilation is sufficient when this product is in use. Use local or general exhaust ventilation to effectively remove and prevent buildup of vapors or mist generated from the 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. In instances where dusts 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 Australia. 8.4 Eye Protection: Avoid eye contact. None required under normal conditions of use. Safety glasses could be used when handling or using large quantities of this product. None required under normal conditions of use. However, may cause skin irritation in some sensitive 8.5 Hand Protection: individuals. When handling large quantities (e.g., ≥ 1 gallon (3.8 L)), wear rubber, nitrile or impervious 8.6 Body Protection: No apron required when handling small quantities. When handling large quantities (e.g., ≥ 5 lbs), eye wash stations and deluge showers should be available. Upon completion of work activities involving large quantities of this product, wash any exposed areas thoroughly with soap and water.



Page 3 of 5 SDS-E-S100L

Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS, GHS & 1272/2008/EC Standards SDS Revision: 5.0 SDS Revision Date: 2/1/2018

9. PHYSICAL & CHEMICAL PROPERTIES 9 1 Appearance: Light blue 9.2 Odor: Ethereal / hydrocarbon odor 9.3 Odor Threshold: NA 94 NA 9.5 Melting Point/Freezing Point: NA 9.6 Initial Boiling Point/Boiling >220 °C (428 °F) Range: 9.7 Flashpoint >250 °C (482 °F) 9.8 Upper/Lower Flammability Limits: Vapor Pressure: 9.9 < 0.1 mm Hg @ 20 °C (68 °F) Vapor Density 9 10 Relative Density: 9 11 0.893 9.12 Solubility: Soluble Partition Coefficient (log Pow): 9.13 NA 9.14 Autoignition Temperature NA 9.15 Decomposition Temperature: NA 9.16 Viscosity: 5.4-7.5 cSt @ 104 °F 9.17 Other Information: NA 10. STABILITY & REACTIVITY Stable under normal conditions; unstable with heat or contamination. 10.1 10.2 Hazardous Decomposition Oxides of carbon (CO, CO₂). Hazardous Polymerization: 10.3 Will not occur 10.4 Conditions to Avoid: Open flames, sparks, high heat, incompatible substances and direct sunlight. 10.5 Incompatible Substances: Avoid extreme heat and ignition sources. Store away from oxidizers. 11. TOXICOLOGICAL INFORMATION Routes of Entry: Absorption: YES NO Toxicity Data: 11.2 This product has NOT been tested on animals to obtain toxicology data. Toxicology data, found in scientific literature, is available for some of the components of the product and is not presented in this document 11.3 Acute Toxicity: Moderate irritation to eyes and skin near affected areas. 11.4 Chronic Toxicity This material may aggravate any pre-existing skin condition (e.g., dermatitis) Suspected Carcinogen: 11.5 Reproductive Toxicity: 11.6 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: The product can cause allergic skin reactions (e.g., rashes, welts, dermatitis) upon prolonged or repeated exposure. Biological Exposure Indices: ΝE Physician Recommendations: 11.9 Treat symptomatically. 12. ECOLOGICAL INFORMATION There is no specific data available for this product 12.1 Environmental Stability: 12.2 Effects on Plants & Animals: There is 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 13.1 Waste Disposal: Products covered by this SDS, in their original form, when disposed as waste, are considered non hazardous waste 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. Special Considerations: 13.2



Page 4 of 5 SDS-E-S100L

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

SDS Revision: 5.0

SDS Revision Date: 2/1/2018

| 44 TRANSPORTATION INFORMATION | | | | | |
|--|-------------------------------|--|--|---|--|
| 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 | | | |
| 14.4 | TDGR (Canadian GND): | NOT REGULATED | | | |
| 14.5 | ADR/RID (EU): | NOT REGULATED | | | |
| 14.6 | SCT (MEXICO): | NOT REGULATED | | | |
| 14.7 | ADGR (AUS): | NOT REGULATED | | | |
| | | 15. REGULATORY I | NFORMATION | | |
| 15.1 | SARA Reporting Requirements: | This product does not contain any substances su | ubject to SARA Title III, section 313 reporting require | ements. | |
| 15.2 | SARA TPQ: | There are no specific Threshold Planning Quanti | | | |
| 15.3 | TSCA Inventory Status: | The components of this product are listed on the | | | |
| 15.4 | CERCLA Reportable Quantity: | NA | | | |
| 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 SDS 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. MIS Class D2B (Other Toxic Effects). | | | |
| 15.7 | State Regulatory Information: | No ingredients in this product, present in a corciteria lists: California Proposition 65 (CA65), List (FL), Massachusetts Hazardous Substar Hazardous Substances List (MN), New Jersey Pennsylvania Right-to-Know List (PA), Was Substances List (WI). This product does not contain any chemicals known and chem | ncentration of 1.0% or greater, are listed on any of Delaware Air Quality Management List (DE), Floridaces List (MA), Michigan Critical Substances Li Right-to-Know List (NJ), New York Hazardous Suhington Permissible Exposures List (WA), Wishown to the State of California to cause cancer, bit | a Toxic Substances st (MI), Minnesota ibstances List (NY), sconsin Hazardous | |
| 15.8 | Other Requirements: | reproductive harm. For more information go to www.P65Warnings.ca.gov. NA | | | |
| | · | 101 | | | |
| | | 16. OTHER INFO | RMATION | | |
| 16.1 | Other Information: | | only as directed. Avoid contact with eyes. In case of show the label where possible). If skin irritation of IILDREN. | | |
| 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/ | CAIG LABORATORIES, INC. | | |
| 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 | ShipMate ShipMate Dangerous Goods Training & Consulting | | |



Page 5 of 5 SDS-E-S100L

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

SDS Revision: 5.0

SDS Revision Date: 2/1/2018

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 | 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

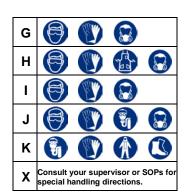
HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

| 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 THE | |
| Ε | | | |
| F | | TH. | |





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 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 | \sim 2 |
| ALK | Alkaline | |
| COR | Corrosive | / \ \ \ \ |
| ₩ | 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 | 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 | 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) |
| WGK | Wassergefährdungsklassen (German Water Hazard Class) |

WORKPLACE HAZARDOUS MATERIALS IDENTIFICATION (WHMIS) SYSTEM:

| 0 | * | (2) | (3) | \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:

| | ® | | \Diamond | N. C. | | \Diamond | | * |
|-----------|-----------|----------|-------------|---|-------|-----------------------|------------------|-------------|
| GHS01 | GHS02 | GHS03 | GHS04 | GHS05 | GHS06 | GHS07 | GHS08 | GHS09 |
| Explosive | Flammable | Oxidizer | Pressurized | Corrosive | Toxic | Harmful Irritating | Health Hazard | Environment |