1. **Applicability:**
   Applicable to liquid materials associated with the handling and storage of products at the Weiser, Idaho facility and to finished goods manufactured by Weiser that are provided to customers.

SAFETY DATA SHEET (SDS)

Prepared in accordance with OSHA 29 CFR 1910.1200 and EU CLP Regulation (EC) No 1272/2008

Product Name: KLeGuard™ EMI Coating / KLeProtect™ Durable Surface Coating
Supersedes: MSDS Rev D (03/13/2023)
Prepared For: Industrial and Professional Use Only

SECTION 1: IDENTIFICATION

Manufacturer: Optic Clear Solutions
Emergency Phone: 800-222-1222 (Poison Control)
Recommended Use: Industrial coating – EMI shielding, corrosion resistance, antifouling
Restrictions on Use: For professional/industrial use only

SECTION 2: HAZARD IDENTIFICATION

Classification (OSHA & EU CLP)

Flammable Liquid – Category 3
Acute Toxicity (Inhalation) – Category 4
Skin Irritation – Category 2
Eye Irritation – Category 2A
Reproductive Toxicity – Category 1B
STOT Repeated Exposure – Category 2 (Liver)

Signal Word: **DANGER**

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SAFETY DATA SHEET (SDS)

SECTION 2: HAZARD IDENTIFICATION

Classification (OSHA & EU CLP)

Pictograms:

Flame/Flammable

Exclamation Mark (Irritant/Acute Toxic)

Health Hazard (Reproductive/STOT)

Hazard Statements:
H226 Flammable liquid and vapor.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

H360D May damage the unborn child.
H373 May cause damage to liver through prolonged or repeated exposure.

Precautionary Statements include **P201, P202, P210, P260, P280, P308+P313, P403+P233, P405, P501**.

Other Hazards: Contains nano-scale graphene. Vapors heavier than air. DMF readily absorbed through skin.

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SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Dimethyl Carbonate (CAS 616-38-6) – 55–60% – Flam. Liq. 2
Dimethylformamide (CAS 68-12-2) – 30–35% – Repr. 1B, Acute Tox 4, STOT RE 2 (Skin)
Graphene Nanoplatelets (CAS 7782-42-5) – 5–10% – Not classified (dust hazard if dried)

SECTION 4: FIRST AID MEASURES

Eyes: Rinse cautiously for 15 minutes. Seek medical attention.
Skin: Remove contaminated clothing. Wash thoroughly.
Inhalation: Move to fresh air. Provide oxygen if needed.
Ingestion: Do not induce vomiting. Seek medical attention.
Symptoms: CNS depression, irritation, liver effects.
Special Note: Reproductive hazard.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Media: CO_2, dry chemical, alcohol-resistant foam.
Specific Hazards: Vapors may travel and flashback.
Protective Equipment: SCBA required.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Eliminate ignition sources. Absorb with inert material. Prevent entry into waterways. Provide ventilation.

SECTION 7: HANDLING AND STORAGE

Ground/bond containers. Avoid skin contact. Store locked in flammable storage area. Protect from light and heat.

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SAFETY DATA SHEET (SDS)

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

DMF OSHA PEL: 10 ppm TWA (Skin)
ACGIH TLV: 10 ppm TWA (Skin)
Engineering Controls: Explosion-proof ventilation.
PPE: Chemical gloves, goggles, protective clothing, respirator per 29 CFR 1910.134.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark brown/black liquid
Flash Point: 34°C
VOC: 352 g/L
Autoignition: 445°C
Solubility: Soluble
Relative Density: ~1.0–1.1
Boiling Range: 90–160°C (mixture estimate)

SECTION 10: STABILITY AND REACTIVITY

Stable under normal conditions. Avoid oxidizers and ignition sources. Decomposition may produce CO and CO_2.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute inhalation toxicity estimate based on DMF component.
Reproductive Toxicity Category 1B due to DMF concentration (>0.3%).
Target Organ: Liver (repeated exposure).
Routes: Inhalation, dermal absorption.

SECTION 12: ECOLOGICAL INFORMATION

Not classified as environmentally hazardous under CLP. Avoid release to environment.

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SAFETY DATA SHEET (SDS)

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose as hazardous waste per 40 CFR 261 and local regulations.

SECTION 14: TRANSPORT INFORMATION

UN 2265
Proper Shipping Name: Dimethylformamide Solution
Hazard Class: 3
Packing Group: III

SECTION 15: REGULATORY INFORMATION

OSHA HazCom compliant.
EU CLP aligned.
Prop 65: Contains Dimethylformamide.

SECTION 16: OTHER INFORMATION

Prepared for ISO 9001 quality documentation and industrial distribution.

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