SECTION 1: IDENTIFICATION

Product identifier	Opti Crystal Emulsion Remover (concentrated powder)
Product code	Opti Crystal
Other means of identification	Periodate stencil/emulsion remover powder
Chemical type	Substance - sodium metaperiodate
Recommended use	Concentrated powder dissolved in water to remove cured screen-printing emulsion (stencil) from mesh.
Restrictions on use	For industrial and professional use only.
Manufacturer / supplier	Champion Inks 200 S. Newman Street, Unit 4 & 5, Hackensack, NJ 07601, USA
Telephone / web	+1 (302) 667-6096 - www.championinks.com - web@championinks.com
Emergency telephone (24-hr)	CHEMTREC - USA / Canada: +1-800-424-9300 - International: +1-703-527-3887 - Contract CCN863598

SECTION 2: HAZARD(S) IDENTIFICATION

OSHA HCS classification	Oxidizing solids - Category 2 (H272); Acute toxicity, oral - Category 3 (H301); Skin corrosion/irritation - Category 2 (H315); Serious eye damage/eye irritation - Category 2 (H319); Specific target organ toxicity, single exposure - Category 3 (H335, respiratory irritation).
Signal word	**DANGER**
Pictograms	Flame over circle - Oxidizer (GHS03); Skull and crossbones (GHS06); Exclamation mark (GHS07). **[VERIFY]** Add the GHS symbols to the label.
Hazard statements	H272 May intensify fire; oxidizer. H301 Toxic if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.
Precautionary - Prevention	P210 Keep away from heat and combustible materials - No smoking. P220 Keep away from clothing and other combustible/reducing materials. P221 Take care to avoid mixing with combustibles. P260/P261 Do not breathe dust. P264 Wash hands thoroughly after handling. P270 Do not eat/drink/smoke when using. P280 Wear protective gloves, eye and face protection.
Precautionary - Response	P301+P310 IF SWALLOWED: immediately call a POISON CENTER/doctor. P330 Rinse mouth. P302+P352 IF ON SKIN: wash with plenty of water. P305+P351+P338 IF IN EYES: rinse cautiously several minutes; remove contact lenses if easy; continue rinsing. P304+P340 IF INHALED: remove to fresh air. P370+P378 In case of fire: use WATER ONLY to extinguish.
Precautionary - Storage / Disposal	P234/P235 Keep only in original container; keep cool. P405 Store locked up, away from combustibles and reducing agents. P501 Dispose of contents/container per regulations.
Hazards not otherwise classified (HNOC)	Strong oxidizer - contact with combustible or reducing materials may cause fire. Generates its own oxygen when heated.
Unknown acute toxicity	0% of unknown acute toxicity.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Wt %	GHS classification of component
Sodium metaperiodate (sodium periodate, NaIO4)	7790-28-5	90 - 100	Ox. Sol. 2 (H272); Acute Tox. 3 (H301); Skin Irrit. 2 (H315); Eye Irrit. 2 (H319); STOT SE 3 (H335)

[VERIFY] Confirm whether the finished Opti Crystal product is neat sodium metaperiodate or contains additional components (e.g., an acid salt or filler); adjust Section 3 and classification accordingly. Supplier source: Deepwater Chemicals (SDS available on request); reference SDS: SPI Supplies / sodium periodate, CAS 7790-28-5.

SECTION 4: FIRST-AID MEASURES

Inhalation	Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

Skin contact	Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention.
Eye contact	Flush eyes with copious water for at least 15 minutes, lifting eyelids. Get immediate medical attention.
Ingestion	Toxic if swallowed. Rinse mouth; give 2-4 cupfuls of water/milk if conscious. Do NOT induce vomiting unless directed. Call a POISON CENTER / doctor immediately.
Most important symptoms / effects	Irritation of eyes, skin and respiratory tract; may be toxic/harmful if swallowed.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media	**Use WATER ONLY.** Flood with water to control the reaction - the material generates its own oxygen.
Unsuitable extinguishing media	Do NOT use dry chemical, CO2, Halon or foam on this oxidizer.
Specific hazards	Strong oxidizer; contact with combustible or reducing materials may cause fire. Thermal decomposition yields hydrogen iodide, iodine and sodium oxide.
Protection for firefighters	Full protective clothing and NIOSH-approved positive-pressure SCBA.
Flash point	Not applicable (non-combustible oxidizing solid).

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Wear goggles, face protection, gloves and protective clothing; SCBA if dusty. Keep all combustibles away from spilled material.
Environmental precautions	Do not allow to reach groundwater, watercourses or sewers.
Containment and cleanup	Avoid raising dust. Sweep/scoop into a suitable container; keep away from combustibles and reducing agents. Do not return spilled material to the original container.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Avoid contact with skin, eyes and clothing. Minimize dust; avoid breathing dust. Keep away from combustible and reducing materials and ignition sources. Wash thoroughly after handling.
Conditions for safe storage	Store in a tightly closed container in a cool, dry, well-ventilated area, away from combustibles, reducing agents and incompatibles. Store locked up.
Incompatible materials	Combustible/organic materials, strong reducing agents.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Component (CAS)	OSHA PEL	ACGIH TLV	Notes
Sodium metaperiodate (7790-28-5)	Not established	Not established	Minimize dust; oxidizer

Engineering controls	Provide local exhaust / general ventilation to keep airborne dust low. Eyewash station and safety shower required.
Respiratory protection	NIOSH-approved dust respirator if dust is generated or limits may be exceeded.
Eye / face protection	Chemical splash goggles and face shield.
Skin protection	Chemical-resistant gloves and protective clothing.
General hygiene	Wash hands after handling; do not eat/drink/smoke in work areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Property	Value
Physical state	Crystalline solid (powder)	Melting/decomposition	~300 deg C (decomposes)
Appearance	White to light-yellow crystals	Solubility in water	~80 g/L @ 20 deg C

Property	Value	Property	Value
Odor	Odorless	Specific gravity	**[VERIFY]** ~ 3.9 (solid)
pH (in solution)	Acidic **[VERIFY]**	Flash point	Not applicable (oxidizer)
Oxidizing properties	Strong oxidizer	Molecular weight	213.89 ($NaIO_4$)

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Strong oxidizer; reacts with combustible and reducing materials.
Chemical stability	Stable under normal conditions of temperature and pressure.
Possibility of hazardous reactions	Contact with combustibles/reducers may cause fire. Generates oxygen when heated.
Conditions to avoid	Heat, ignition sources, dust generation, contact with incompatibles.
Incompatible materials	Combustible/organic materials, strong reducing agents.
Hazardous decomposition products	Hydrogen iodide, iodine, sodium oxide.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure	Inhalation of dust; skin/eye contact; ingestion.
Acute toxicity	Toxic if swallowed (Cat. 3).
Skin / eye	Causes skin and eye irritation.
Respiratory	Dust may cause respiratory-tract irritation (STOT SE 3).
Carcinogenicity	Not listed by IARC, NTP, OSHA or California Prop 65.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	No specific data; do not release undiluted product to the environment.
Persistence and degradability	Inorganic oxidizer; reduced to iodate/iodide in the environment.
Bioaccumulative potential	Not expected.
Mobility in soil	Soluble - mobile in water.
Other adverse effects	Oxidizer - may harm aquatic organisms.

OSHA does not enforce the content of Sections 12-15, but they are required to maintain the GHS 16-section order.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods	Dispose of per federal, state and local regulations. May require reduction/neutralization of the oxidizer before disposal. **[VERIFY]** Confirm waste characterization (oxidizer).
Contaminated packaging	Do not reuse containers; dispose of per regulations.

SECTION 14: TRANSPORT INFORMATION

US DOT	UN3087, OXIDIZING SOLID, TOXIC, N.O.S. (sodium metaperiodate), Class 5.1 (6.1), Packing Group II.
IATA / IMDG	UN3087, Oxidizing solid, toxic, n.o.s. (sodium metaperiodate), Class 5.1 (6.1), PG II.
Special precautions	Keep away from combustibles during transport. **[VERIFY]** Confirm any limited-quantity/consumer options for retail pack sizes.

SECTION 15: REGULATORY INFORMATION

US TSCA inventory	Sodium metaperiodate (7790-28-5) is listed on the TSCA Inventory.
SARA 311/312 hazard categories	Physical hazard (oxidizer); Acute health hazard.

SARA 313 (EPCRA)	Not reportable under Section 313.
California Proposition 65	Not listed.
State Right-to-Know	Sodium periodate is listed on the New Jersey and Pennsylvania Right-to-Know lists.

SECTION 16: OTHER INFORMATION

Prepared by	Luis Uribe - Champion Inks (Regulatory / EHS)
Issue / revision date	November 24, 2026
Version	1.0 DRAFT - First issue under the Champion Inks brand. House format per OSHA HCS-2024 / GHS Rev. 7.
Change note	[VERIFY] Oxidizer (DOT Class 5.1/6.1). Confirm the finished Opti Crystal composition (neat vs blended), the in-use dilution instructions, and the retail transport classification before issuing. EHS review required.

Disclaimer: The information herein is believed to be accurate and is provided in good faith but without warranty of any kind. It relates only to the specific product designated. The user is responsible for determining suitability and compliance with all applicable regulations. --- End of Safety Data Sheet