SECTION 1: IDENTIFICATION

Product identifier	OPTI-980 Slow Retarder (Isophorone)
Product code	OPTI-980
Other means of identification	Very slow retarder (T-980)
Chemical type	Single substance - isophorone
Recommended use	Very slow retarder for solvent screen inks (recommended in Champion vinyl/PU ink TDSs; use sparingly).
Restrictions on use	For industrial and professional screen-printing use only (ink reducer / retarder / wash-up auxiliary). Not a consumer product; not for any use involving direct or prolonged skin contact. Use only with adequate ventilation.
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 / GHS classification	Flammable Liquid Category 4 (H227); Acute Toxicity Category 4 - oral (H302) and dermal (H312); Eye Irritation Category 2 (H319); STOT SE 3 (H335); Carcinogenicity Category 2 (H351).
Signal word	WARNING
Pictograms	GHS08 (health hazard); GHS07 (exclamation mark). No flame pictogram (Flam. Liq. 4).
Hazard statements	H227 Combustible liquid. H302 Harmful if swallowed. H312 Harmful in contact with skin. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H351 Suspected of causing cancer.
Precautionary - prevention	P201 Obtain special instructions before use. P210 Keep away from heat/open flames. P261 Avoid breathing vapors. P264 Wash thoroughly after handling. P280 Wear protective gloves and eye/face protection.
Precautionary - response / storage / disposal	P308+P313 IF exposed or concerned: Get medical advice. P305+P351+P338 IF IN EYES: Rinse cautiously with water. P501 Dispose of per regulations.
Unknown acute toxicity	None; components are disclosed in Section 3.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Wt %	GHS classification of component
Isophorone	78-59-1	100	Flam. Liq. 4 (H227); Acute Tox. 4 (H302, H312); Eye Irrit. 2 (H319); STOT SE 3 (H335); Carc. 2 (H351)

Single-component isophorone. Suspected carcinogen (Prop 65-listed). Combustible liquid. Classification reconciled to current US supplier SDS (Fisher/Acros + MilliporeSigma): acute toxicity is oral + dermal (not inhalation); no skin-irritation classification.

SECTION 4: FIRST-AID MEASURES

Inhalation	Remove to fresh air. Give oxygen if breathing is difficult. Get medical attention if symptoms persist.
Skin contact	Remove contaminated clothing; wash with soap and water. Get medical attention if irritation develops. Launder clothing before reuse.
Eye contact	Rinse cautiously with water for at least 15 minutes; remove contact lenses if easy; continue rinsing. Get medical attention.
Ingestion	Do not induce vomiting. Rinse mouth. Get medical attention.
Most important symptoms / effects	Harmful if swallowed or in contact with skin; eye and respiratory irritation; suspected carcinogen.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media	Foam, dry chemical, carbon dioxide or water fog.
Unsuitable extinguishing media	Do not use a solid water stream (may spread fire).
Specific hazards	Combustible liquid. Vapors are heavier than air. Combustion produces oxides of carbon and irritating vapors.
Special protective equipment	NIOSH-approved SCBA and full protective gear.
Flash point	Champion controlled 190 deg F (88 deg C) - Flammable Liquid Category 4 (H227). NOTE: current supplier reference ~204.8 deg F (96 deg C) would be above the OSHA cutoff; Cat 4 applied per the Champion 190 deg F value - confirm the controlled test value/method.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Eliminate ignition sources; ventilate; wear PPE; avoid breathing vapors and skin/eye contact.
Environmental precautions	Prevent entry into drains, sewers and waterways.
Containment and cleanup	Absorb with inert absorbent; place in a closed, labeled container for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Use with adequate ventilation; avoid breathing vapors and skin/eye contact. Keep away from heat, sparks and open flame; ground containers when transferring.
Conditions for safe storage	Store in a cool, dry, well-ventilated area away from ignition sources and oxidizers; keep containers tightly closed.
Incompatible materials	Strong oxidizers, strong acids and strong bases.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Component (CAS)	OSHA PEL	ACGIH TLV	NIOSH REL
Isophorone (78-59-1)	25 ppm ceiling	5 ppm ceiling	4 ppm TWA

Engineering controls	Local exhaust and general ventilation to keep vapor below the limits above; use explosion-proof equipment for flammable grades.
Respiratory protection	NIOSH-approved organic-vapor respirator if limits are exceeded or ventilation is inadequate.
Eye / face protection	Chemical safety goggles.
Skin protection	Chemical-resistant (nitrile) gloves and protective clothing; verify breakthrough time.
General hygiene	Wash hands before eating/drinking/smoking; launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	Property	Value
Physical state	Liquid	Flash point	190 deg F (88 deg C) [Champion controlled; supplier ref ~205 deg F]
Color	Clear to pale	Relative density	~ 0.92
Odor	Solvent	Vapor density	Heavier than air
Solubility in water	Slightly soluble	VOC	Essentially 100% (solvent auxiliary)
Flammability	Combustible liquid (Flam. Liq. 4, per Champion 190 deg F)	Boiling range	215 deg C

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions.
Chemical stability	Stable.
Possibility of hazardous reactions	None under normal use.

Conditions to avoid	Heat, sparks, open flame and ignition sources.
Incompatible materials	Strong oxidizers, acids and bases.
Hazardous decomposition products	Oxides of carbon and irritating vapors on combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure	Inhalation of vapor; skin and eye contact; ingestion.
Acute toxicity	Harmful if swallowed or in contact with skin; eye and respiratory irritation; suspected carcinogen.
Skin corrosion / irritation	No skin-irritation classification (per current supplier SDS); harmful in contact with skin (Acute Tox. 4 dermal).
Serious eye damage / irritation	Causes serious eye irritation.
Reproductive toxicity	Not classified for reproductive toxicity.
Carcinogenicity	Carc. 2 (H351) - suspected carcinogen; isophorone is California Prop 65-listed (cancer).
STOT / aspiration	STOT SE 3 (respiratory irritation).

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Avoid release to the environment.
Persistence and degradability	Component-dependent.
Bioaccumulative potential	Low.
Mobility in soil	Mobile.
Other adverse effects	None known.

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	Determine waste classification at the time of disposal in accordance with applicable federal, state and local requirements. Evaluate the actual waste stream for ignitability (D001). Dispose of through a licensed contractor.
Contaminated packaging	Empty containers retain residue; dispose of per regulations.

SECTION 14: TRANSPORT INFORMATION

US DOT (49 CFR)	Not a DOT flammable liquid at ambient (flash 190 deg F); not regulated in non-bulk packaging.
IATA / IMDG	Not restricted.
Special precautions	Keep away from ignition sources during transport.

SECTION 15: REGULATORY INFORMATION

US TSCA inventory	All components are listed on, or exempt from, the TSCA Inventory.
SARA 311/312 hazard categories	Combustible liquid (physical); health (carcinogenicity; acute; irritation).
SARA 313 (EPCRA)	Isophorone is EPCRA 313-listed - report if thresholds exceeded.
California Proposition 65	Sold for industrial/professional use only. This product contains isophorone, a chemical known to the State of California to cause cancer. The presence of a listed chemical does not by itself establish that a warning is required for a given exposure; Champion Inks does not provide a consumer safe-harbor warning and the downstream user must determine its own Proposition 65 obligations based on actual exposure.
State Right-to-Know	Isophorone may appear on NJ/PA/MA Right-to-Know lists.

SECTION 16: OTHER INFORMATION

Prepared by	Luis Uribe - Champion Inks (Regulatory / EHS)
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Revision history	Rev 1.0 (2026-11-24): First issue under the Champion Inks brand.

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