SECTION 1: IDENTIFICATION

Product identifier	**Opti-700 Haze Remover**
Product code	Opti-700
Chemical name	N-Methyl-2-pyrrolidone (NMP), CAS 872-50-4
Other means of identification	1-Methyl-2-pyrrolidone; NMP; EC 212-828-1
Recommended use	Screen / mesh haze and ghost-image remover for reclaiming screen printing screens. Industrial and professional use only.
Restrictions on use	For industrial and professional use only. Not for consumer, food-contact, medical, pharmaceutical or cosmetic use. **Reproductive hazard - see Sections 2, 8 and 11. See Section 15 regarding EPA TSCA action on NMP.**
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 CHEMTREC Contract / CCN863598

SECTION 2: HAZARD(S) IDENTIFICATION

GHS classification (OSHA HCS-2024, 29 CFR 1910.1200; GHS Rev. 7):

Hazard class	Cat.	Hazard statement
Reproductive toxicity	1B	H360D - May damage the unborn child.
Skin corrosion / irritation	2	H315 - Causes skin irritation.
Serious eye damage / eye irritation	2	H319 - Causes serious eye irritation.
STOT - single exposure (respiratory irritation)	3	H335 - May cause respiratory irritation.

Signal word	**DANGER**
Pictograms	GHS08 (Health hazard) and GHS07 (Exclamation mark)
Hazard statements	H360D, H315, H319, H335
Precautionary - Prevention	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P260 Do not breathe vapors or mist. P264 Wash thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves, protective clothing and eye/face protection. **Prevent skin contact - NMP is readily absorbed through the skin.**
Precautionary - Response	P308+P313 IF exposed or concerned: Get medical advice/attention. P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses if present and easy; continue rinsing. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P332+P313 / P337+P313 If skin/eye irritation occurs or persists: Get medical advice/attention.
Precautionary - Storage / Disposal	P405 Store locked up. P403+P233 Store in a well-ventilated place; keep container tightly closed. P501 Dispose of contents/container in accordance with applicable local, state and federal regulations.
Hazards not otherwise classified (HNOC)	Combustible liquid (flash point ~91 deg C). Not acutely toxic by the oral route. Readily biodegradable.
Unknown acute toxicity	Not applicable (NMP is the principal component).



GHS08
Health hazard



GHS07
Irritant / harmful

REPRODUCTIVE HAZARD - This product contains N-methylpyrrolidone (NMP), which may damage the unborn child and is readily absorbed through the skin. Pregnant or breastfeeding workers should not be exposed. Skin-contact prevention (chemical-resistant gloves and clothing) is the primary control - see Sections 8 and 11.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	EC No.	Wt %
N-Methyl-2-pyrrolidone (NMP)	872-50-4	212-828-1	Principal component - confirm exact wt% for the finished formulation

Molecular formula C5H9NO. If the finished haze remover is diluted or compounded with water or co-solvents, list each additional hazardous ingredient with its CAS number and concentration before issue. Exact percentages may be withheld as a trade secret per 29 CFR 1910.1200(i).

SECTION 4: FIRST-AID MEASURES

Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical attention if respiratory irritation or other symptoms occur.
Skin contact	Remove contaminated clothing. Wash affected skin with plenty of soap and water. NMP is absorbed through the skin - get medical advice/attention if irritation develops or if significant or repeated contact occurs. Wash contaminated clothing before reuse.
Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do; continue rinsing. Get medical attention if irritation persists.
Ingestion	Rinse mouth. Do not induce vomiting. Get medical advice/attention if you feel unwell.
Most important symptoms / effects	Skin and eye irritation; respiratory tract irritation. NMP is a reproductive toxicant (may damage the unborn child); exposure of pregnant workers must be prevented.
Immediate medical attention / special treatment	Treat symptomatically. There is no specific antidote. Advise the physician of the reproductive hazard for exposed workers who are or may be pregnant.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media	Dry chemical, alcohol-resistant foam, carbon dioxide (CO2), or water fog.
Unsuitable extinguishing media	Do not use a direct, heavy water stream (may spread the material).
Specific hazards	Combustible liquid. Vapors may form flammable mixtures above the flash point. Thermal decomposition may release carbon monoxide, carbon dioxide and nitrogen oxides.
Hazardous combustion products	Carbon monoxide, carbon dioxide and oxides of nitrogen.
Protection for firefighters	Wear self-contained breathing apparatus (SCBA) and full protective gear. Cool fire-exposed containers with water spray from a protected position.
Flash point	~91 deg C / ~196 deg F (closed cup). Auto-ignition ~245 deg C / ~473 deg F.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Use personal protective equipment (Section 8), especially skin protection. Ensure adequate ventilation. Avoid contact with skin and eyes and avoid breathing vapor or mist. Eliminate ignition sources.

Environmental precautions	Prevent release to drains, waterways and soil. Although NMP is readily biodegradable, avoid uncontrolled release.
Containment and cleanup	Contain and absorb with inert absorbent (sand, earth, vermiculite). Collect into labeled, closed containers for disposal (Section 13). Ventilate the area and wash the spill site.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling	Handle within a closed system or with local exhaust ventilation where feasible, given the reproductive hazard and skin-absorption potential. Prevent skin and eye contact - wear chemical-resistant gloves and clothing. Do not eat, drink or smoke when using. Wash thoroughly after handling.
Conditions for safe storage	Store in a cool, dry, well-ventilated place in tightly closed original containers, away from heat, ignition sources and strong oxidizers. Keep out of the reach of unauthorized persons.
Incompatible materials	Strong oxidizers and strong acids/bases.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits	No OSHA PEL or ACGIH TLV has been established for NMP (CAS 872-50-4). A manufacturer/AIHA-type guidance value of ~10 ppm (8-hr, skin) has historically been applied; control airborne and dermal exposure to as low as reasonably practicable. EPA's proposed TSCA rule emphasizes dermal-contact prevention (see Section 15).
Engineering controls	Use a closed system or local exhaust ventilation. Provide eyewash stations and safety showers. Minimize aerosol/vapor generation.
Skin / hand protection	**Primary control.** Wear chemical-resistant gloves and protective clothing that resist NMP (e.g., butyl rubber, laminate films); nitrile offers limited resistance and should be verified for breakthrough. Prevent all direct skin contact.
Eye / face protection	Chemical splash goggles; face shield where splashing is possible.
Respiratory protection	Where vapor/mist may exceed control levels, use NIOSH-approved organic-vapor respiratory protection per 29 CFR 1910.134.
General hygiene	Wash hands, forearms and face before eating, drinking or smoking and at end of shift. Launder contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid	**Vapor pressure @ 20 deg C**	~0.3 mm Hg (low)
Appearance / color	Clear, colorless to pale yellow	**Vapor density (air=1)**	3.4
Odor	Mild amine / characteristic	**Relative density**	~1.03 (water = 1)
Odor threshold	Not available	**Water solubility**	Miscible
pH	Not available (mildly basic in water)	**Partition coefficient (log Kow)**	-0.38
Melting / freezing point	-24.2 deg C (-11.6 deg F)	**Auto-ignition temperature**	245 deg C (473 deg F)
Boiling point	204 deg C (399 deg F)	**Decomposition temperature**	Not available
Flash point	~91 deg C / ~196 deg F (closed cup)	**Viscosity**	~1.7 mPa.s @ 25 deg C
Evaporation rate	Very slow	**Particle characteristics**	Not applicable (liquid)
Flammability (solid, gas)	Not applicable (combustible liquid)	**VOC content**	Confirm for finished formulation
Flammability / explosive limits	Not available		

SECTION 10: STABILITY AND REACTIVITY

Reactivity	Not reactive under normal conditions of use.
Chemical stability	Stable under normal storage and handling conditions.

Possibility of hazardous reactions	None known under normal conditions; hazardous polymerization will not occur.
Conditions to avoid	Excessive heat, ignition sources and incompatible materials.
Incompatible materials	Strong oxidizers and strong acids/bases.
Hazardous decomposition products	Carbon monoxide, carbon dioxide and oxides of nitrogen.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure	Skin contact (and skin absorption), eye contact, inhalation, ingestion.
Acute toxicity	Low acute toxicity by all relevant routes; oral: not acutely toxic. Inhalation of vapor/mist may cause respiratory tract irritation.
Skin / eye	Skin: may cause irritation (redness, rash, itching, swelling); readily absorbed through the skin. Eye: may cause irritation (discomfort, pain, redness, visual impairment).
Sensitization / mutagenicity	Not a sensitizer. Not a mutagen.
Carcinogenicity	Not a carcinogen (not listed by IARC, NTP or OSHA).
Reproductive toxicity	**May damage the unborn child (Reproductive toxicity Category 1B, H360D).** Exposure of pregnant or breastfeeding workers must be prevented.
STOT	Single exposure: may cause respiratory irritation. Repeated inhalation exposure may cause respiratory-system irritation.
Aspiration hazard	Not classified.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Acutely not harmful to fish, freshwater or marine invertebrates, or aquatic plants. Avoid uncontrolled release.
Persistence and degradability	Readily biodegradable; not persistent.
Bioaccumulative potential	Not bioaccumulative (log Kow -0.38).
Mobility in soil	Miscible with water; mobile in soil/water but rapidly biodegrades.
Other adverse effects	None known.

Note: 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

Waste disposal methods	Dispose of contents and container in accordance with applicable local, state and federal regulations, using a licensed waste-disposal contractor. Do not discharge to drains, sewers or the environment. The waste generator must determine the appropriate waste classification under 40 CFR 261 at the time of disposal.
Contaminated packaging	Empty containers may retain residue; follow label warnings even after emptying. Send to an approved waste-handling, recycling or disposal facility.

SECTION 14: TRANSPORT INFORMATION

US DOT	Not regulated as a dangerous good (NMP; flash point above flammable-liquid threshold).
IATA / ICAO (air)	Not regulated as dangerous goods.
IMDG / IMO (sea)	Not regulated as dangerous goods / not a marine pollutant.
Special precautions	None known. Protect from excessive heat.

SECTION 15: REGULATORY INFORMATION

OSHA Hazard Communication	Hazardous chemical per 29 CFR 1910.1200 (HCS-2024, GHS Rev. 7).
TSCA inventory	N-Methylpyrrolidone (872-50-4) is listed on the TSCA Inventory.

EPA TSCA SECTION 6 - NMP RISK MANAGEMENT (PROPOSED)

EPA TSCA status (NMP)	EPA published a proposed TSCA Section 6 risk-management rule for NMP on June 14, 2024 (docket EPA-HQ-OPPT-2020-0744). As proposed, it would establish a Workplace Chemical Protection Program (WCPP) focused on preventing dermal contact for nearly all industrial/commercial uses, and would set consumer concentration limits (e.g., not greater than 45% in certain consumer glues/adhesives) with container and labeling requirements. **As of this SDS issue date the rule is proposed, not final.** Champion Inks must monitor the docket and comply with the final rule and its compliance dates once published, including any dermal-protection / WCPP obligations for this haze remover.
SARA 311/312 hazard categories	Chronic health hazard (reproductive toxicity).
SARA 313 (EPCRA)	NMP is not currently on the EPCRA Section 313 (TRI) list (verify against the current list).
Clean Air Act - HAPs	NMP is not listed as a Hazardous Air Pollutant under CAA Section 112.
California Proposition 65	NMP is not currently listed under California Proposition 65 (verify before relying on this; confirm any co-solvents in the finished formulation).
State Right-to-Know	NMP may appear on state Right-to-Know lists (e.g., NJ, PA, MA). Verify against the finished formulation.

Product stewardship & certifications

Phthalate-free	Yes. Champion Inks inks are formulated without ortho-phthalate plasticizers; plastisol inks use phthalate-free plasticizers such as DOTP (dioctyl terephthalate, CAS 6422-86-2) or adipate esters (e.g., dioctyl adipate). No ortho-phthalates restricted under CPSIA, REACH Annex XVII or California Proposition 65 are intentionally added.
California Proposition 65 compliance	Champion Inks manages its products for California Proposition 65 compliance. Where a product contains a listed substance above the applicable safe-harbor level, the required warning is provided in this Section 15; where none is present above safe-harbor levels, no warning is required.

SECTION 16: OTHER INFORMATION

Rating system	Health	Flammability	Physical hazard	PPE
HMIS	2*	1	0	X (see Section 8)
NFPA 704	1	1	0	-

* Chronic health hazard (reproductive toxicity). PPE rating 'X' indicates PPE depends on the task and conditions - see Section 8. HMIS/NFPA values are reasonable for NMP - confirm against your facility hazard assessment.

Full text of hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H360D May damage the unborn child.
Prepared by	Champion Inks - Regulatory / EHS
Issue / revision date	November 24, 2026
Version	1.0 - First issue under the Champion Inks brand. House format per OSHA HCS-2024 / GHS Rev. 7.
Data to confirm before release	Exact NMP concentration and any co-solvents/water in the finished haze-remover formulation; VOC content; finished-product flash point; and the final EPA TSCA NMP rule once published.

Disclaimer: The information herein is believed to be accurate and is provided in good faith but without warranty of any kind, express or implied. It relates only to the specific material identified and may not be valid if used in combination with any other material or in any process. The user is responsible for determining suitability and for compliance with all applicable regulations.

End of Safety Data Sheet