



SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

073
CURE PROMOTER
UV CURABLE SCREEN PRINTING INK

North America:
NOR-COTE INTERNATIONAL, INC.
506 Lafayette Avenue
Crawfordsville, Indiana 47933 USA
Phone: 765-362-9180 (day phone)
MSDS Issuer: EHS Department
Emergency Phone (United States):
800-424-9300
CHEMTREC

Europe:
NOR-COTE INTERNATIONAL LTD.
Unit 8 Warrior Park, Eagle Close
Chandlers Ford Industrial Estate
Eastleigh, Hampshire
SO53 4NF England
Tel: +44 (0) 23 80270542 (day phone)
Emergency Phone (Outside U.S.):
703-527-3887 CHEMTREC

Asia:
NOR-COTE INTERNATIONAL PTE. LTD.
Blk 4012 Ang Mo Kio Ave 10
#05-08 Techplace 1,
Singapore 569628
Tel: +65 6291-0898 (day phone)
Emergency Phone (Outside U.S.):
703-527-3887 CHEMTREC

SECTION 2 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Product is a moderate viscosity liquid with mild acrylic odor that may irritate eyes, skin and respiratory system. Product may also cause allergic skin reaction and/or sensitization. Avoid breathing vapors. May be harmful upon ingestion. Product is toxic to aquatic organisms. Do not allow it to enter a bodies of water.

ROUTES OF ENTRY: Dermal, Inhalation, Ingestion

GENERAL HEALTH EFFECTS: Irritant to skin, eyes and respiratory tract. Effects may be delayed for several hours.

ACUTE

- **Skin Contact:** Harmful if absorbed through skin. Ingredients are potential irritant and can cause allergic skin reaction. Repeated or prolonged contact may cause sensitization.
- **Eye Contact:** May cause severe eye irritation. Protect eyes from repeated or prolonged contact.
- **Inhalation:** Harmful if inhaled. DO NOT INHALE VAPORS.
- **Ingestion:** May be harmful if swallowed.

CHRONIC: Skin sensitization may result with chronic overexposure. One component of this product exhibited adverse skin, blood, liver and kidney effects, reduced body weight and testicular atrophy in laboratory animal studies with ingestion at elevated doses. No adverse effects were noted at low doses.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: No data available. Repeated and prolonged overexposure may increase the potential for adverse health effects.

HMIS ® RATING: Health – 2* Flammability - 1 Physical Hazard – 1 PPE – C

SECTION 3 COMPOSITION

INGREDIENT	PERCENT BY WEIGHT	CAS#	EC#	Symbol	Risk Phrase
Photoinitiator Mixture	100%	Proprietary	Proprietary	Xn, N	R22, R50/52/53, R62

SECTION 4 FIRST AID MEASURES

SKIN CONTACT: Remove and isolate contaminated clothing and shoes. Remove excess material from skin with clean cloth. Flush skin with running lukewarm water. Wash affected areas using mild soap.

EYE CONTACT: Flush the eye and under lids with warm water for 15 minutes. Remove any contact lenses during the flushing. Get immediate medical attention if symptoms persist.

INHALATION: Move subject to fresh air and keep warm. If subject is not breathing, administer artificial respiration. If breathing is difficult, have qualified personnel administer oxygen and get medical attention.

INGESTION: If appreciable quantities are swallowed, seek immediate medical attention. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.



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SECTION 5 FIRE FIGHTING MEASURES

FLASHPOINT: Not established but expected to be >200° F (> 93.3°C)
FLAMMABLE/EXPLOSIVE LIMITS (Volume % in air): Not established
EXTINGUISHING METHOD: Water fog, carbon dioxide (CO₂) or dry chemical
AUTO-IGNITION TEMPERATURE: Not established

Evacuate area of all non-emergency personnel. Fire fighters must wear full emergency equipment with self-contained breathing apparatus. At elevated temperatures hazardous polymerization may occur causing container rupture and in extreme cases, explosion. Fight fires from upwind and cool intact containers with water spray or stream at maximum range.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition and ventilate area. Avoid skin and eye contact. Use respiratory protection. Absorb with inert materials such as dry clay or sand and place in closed container for disposal as solid waste in accordance with all applicable regulations.

SECTION 7 HANDLING AND STORAGE

HANDLING: Avoid any unnecessary contact. Use protective clothing specified in Section 8.

STORAGE: Store away from heat and sunlight. Store below 90° F (32° C). Protect containers from physical damage. Storage of containers should conform to flammable and combustible liquid regulations.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS: Not established

ENGINEERING CONTROLS/VENTILATION: Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposure. Dilution ventilation is acceptable, but local mechanical exhaust ventilation is preferred, if practical, at sources of air contamination.

EYE PROTECTION: Use splash-proof safety goggles or safety glasses that are ANSI approved to prevent eye contact. Eyewash availability is also recommended.

HAND PROTECTION: Use nitrile, butyl or other gloves that are resistant to chemicals in Section 2. Replace immediately if punctured or torn or when a change of appearance (color, elasticity, shape) occurs. A minimum of 0.45mm thick gloves for long duration exposure (up to 4 hours) or mechanical handling activities; single use, disposable gloves for short duration exposures not exceeding 30 minutes or where splashes are likely, are recommended.

SKIN PROTECTION: Protective or disposable outer clothing is recommended.

RESPIRATORY PROTECTION: Use of NIOSH approved respirators is recommended where exposure is exceeded. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Respiratory protection programs must comply with 29 CFR 1910.134.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE, PHYSICAL STATE AND ODOR: Moderate viscosity liquid with mild odor

BOILING POINT (°F): Not available

FREEZING POINT: Not available

SPECIFIC GRAVITY: 1.10134

EVAPORATION RATE: <1

VAPOR PRESSURE (mm Hg): Not established

VAPOR DENSITY: Heavier than air

SOLUBILITY IN WATER: Not soluble

VOC: Not established but expected to be <1%

pH: Not available

SECTION 10 REACTIVITY / STABILITY HAZARD DATA

STABILITY: This material is stable under recommended storage and handling conditions.

CONDITIONS TO AVOID: Excessive heat, ignition sources and contamination with dirt and other foreign materials.



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INCOMPATIBILITY: Avoid contamination or inappropriate mixing with strong oxidizing agents, peroxides, strongly caustic materials and metal corrosion products including rust. Do not expose to UV light during storage.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal oxidation or pyrolysis (as in fire) may yield carbon dioxide, carbon monoxide and volatile organic fragments which are flammable, irritating or toxic.

HAZARDOUS POLYMERIZATION: Under certain conditions (excess temperatures and contamination) hazardous polymerization may occur. Avoid high temperature and contamination with foreign materials.

SECTION 11 TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA: No data available

LD50 – Not determined for mixture

LC50 – Not determined for mixture

CARCINOGENICITY: **IARC?** Not listed

NTP? Not listed

OSHA? Not listed

MUTAGENICITY: All ingredients in this product were non-mutagenic

REPRODUCTIVE EFFECTS: Not determined for mixture

SECTION 12 ECOLOGICAL INFORMATION

No determination has been made on ecological impact of this product, however ingredients of this product are toxic and harmful to aquatic organisms and may cause long term adverse effects in aquatic environment. Prevent contamination of the environment with this product, i.e. soil, surface waters, etc.

SECTION 13 DISPOSAL CONSIDERATIONS

This product is not regulated as a hazardous substance under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of this product in accordance with all applicable laws and regulations.

SECTION 14 TRANSPORTATION INFORMATION

Transport this product in accordance with all applicable laws and regulations. This product, as supplied, is not regulated nor classified as a hazardous material/dangerous good by United States Department of Transportation (DOT), the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO), the Canadian Transportation of Dangerous Goods Act (TDG), or the International Air Transport Association (IATA).

SECTION 15 REGULATORY INFORMATION

This Material Safety Data Sheet has been formatted to the best of our ability in accordance with American National Standards Institute (ANSI), European Communities (EC), and contains hazard criteria and all information required by the Canadian Controlled Products Regulation (CPR) in regard to this product.

Australian Inventory Status: All components of this product are currently listed in the Australian Inventory of Chemical Substances (AICS) or otherwise comply with National Industrial Chemicals Notification and Assessment Scheme (NICNAS).

California Proposition 65 RTK: This product contains the following components that are regulated by the state of California as a known carcinogen or reproductive toxin: None known

Canadian Inventory Status: All components of this product are currently listed on the Canadian Domestic Substance List (DSL).

Chinese Inventory Status: All components of this product are listed on the Inventory of Existing Chemical Substances in China.

Clean Air Act- Hazardous Air Pollutants (HAP): This product and its components do not contain any Hazardous Air Pollutants.

Clean Air Act – Ozone Depleting Substances (ODS): This product and its components do not contain Ozone Depleting Substances.

Clean Water Act – Priority Pollutants (PP): This product and its components do not contain Priority Pollutants.

Coalition of Northeastern Governors (CONEG): This product meets the requirements of CONEG pertaining to heavy metals total content of no more than 100 PPM. No heavy metals are added as a part of the formulation, but raw materials may contain residual parts per million as naturally occurring elements.

European Inventory Status: All components of this product are listed on the European Inventory of Existing Commercial Substances (EINECS). This product is classified and labeled in accordance with EC directives.



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Food and Drug Administration (FDA) Food Packaging Status: This product has not been cleared by the FDA for use in food packaging and/or other applications as an indirect food additive.

Japanese Inventory Status: All components of this product are listed on the Japanese Ministry of International Trade and Industry (MITI) List of Existing and New Chemical Substances (ENCS).

Korean Inventory Status: All components of this product are listed on the Korean Chemical Substance List.

Occupational Safety and Health Act (OSHA): This product is classified as a Class IIIB combustible liquid.

Philippine Inventory Status: All components of this product are listed on the Philippine Inventory of Chemical Substances.

Restriction of Hazardous Substances (RoHS): This product complies with the European Union Directive 2002/95/EC legislation.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III:

Section 302 – Extremely Hazardous Substances (EHS): None

Section 304 – CERCLA Hazardous Substances: None

Section 311/312 – Hazard Categories: Acute hazard.

Section 313 – Toxic Chemicals: None

Toxic Substances Control Act (TSCA)

Section 5(e): This product is not regulated under the Consent Order/Significant New Use Rule.

Section 8(b) – Inventory Status: All chemicals in this product are TSCA listed.

SECTION 16 OTHER INFORMATION

HMIS® ratings are a registered trade and service mark of the National Paint and Coatings Association with the following scale:

* = Chronic health effect	PPE Index
4 = Severe Hazard	A = Safety Glasses
3 = Serious Hazard	B = Safety Glasses and Gloves
2 = Moderate Hazard	C = Safety Glasses, Gloves and Protective Apron
1 = Slight Hazard	D = Face Shield, Gloves and Protective Apron
0 = Minimal Hazard	E = Safety Glasses, Gloves and Respirator

EU Risk Phrases

R22: Harmful if swallowed
R50: Very toxic to aquatic organisms
R52: Harmful to aquatic organisms
R53: May cause long-term adverse effects in the aquatic environment
R62: Possible risk of impaired fertility

Definitions

ACGIH – American Conference of Governmental Industrial Hygienists
TWA – Time Weighted Average
TLV – Threshold Limit Value
STEL – Short Term Exposure Limit
CAS# - Chemical Abstract Service Number
NTP – National Toxicology Program
PEL – Permissible Exposure Limit
IARC - International Agency for Research on Cancer
ANSI – American National Standards Institute

Supersedes:

March-12-2007

Disclaimer: To the best of our knowledge, the product information contained herein is based upon data believed to be reliable, however Nor-Cote makes no warranty and disclaims any liability whatsoever for its accuracy or completeness. Since the actual use of the product is beyond our control, no guarantee expressed or implied, is made by Nor-Cote as to the effects of such uses nor does Nor-Cote assume liability arising out of the use of this product by others. It remains the responsibility of the user to ensure that the use of the product herein is in accordance with all applicable laws and regulations.