



# MATERIAL SAFETY DATA SHEET

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

075

### VINYL ADHESION MODIFIER

For use with Ultraviolet 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 pale straw colored liquid with mild acrylic odor that may irritate eyes, skin and respiratory system. Product may also cause allergic skin reaction and/or sensitization.

**ROUTES OF ENTRY:** Dermal, Inhalation, Ingestion

**GENERAL HEALTH EFFECTS:** Irritant to skin, eyes and respiratory tract.

### ACUTE

- **Skin Contact:** Ingredients are potential irritant and can cause allergic skin reaction.
- **Eye Contact:** May cause severe eye irritation. Protect eyes from repeated or prolonged contact.
- **Inhalation:** May be harmful if inhaled. Avoid breathing vapors.
- **Ingestion:** May be harmful if swallowed.

**CHRONIC:** Repeated or prolonged contact may cause sensitization.

**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
Methyldiethanolamine	78-80%	105-59-9	203-312-7	Xi	R36
Surfactant	20%	Proprietary	Proprietary	Not available	Not Hazardous

## 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.

## 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



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**OSHA CLASSIFICATION:** This product is classified as a Class IIIB combustible liquid.

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 for mixture.

**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:** Pale straw liquid with mild odor

**BOILING POINT (°F):** Not available

**FREEZING POINT:** Not available

**SPECIFIC GRAVITY:** 1.03999

**EVAPORATION RATE:** <1

**VAPOR PRESSURE (mm Hg):** Not established

**VAPOR DENSITY:** Heavier than air

**SOLUBILITY IN WATER:** Not soluble

**VOC:** Not established

**pH:** Not established

**DENSITY:** 3.93 kg/gal (8.66 lb/gal)

## 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.

**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.



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**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

If material, as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261 as supplied. Dispose of this material in accordance with all applicable federal, state, provincial, and local 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.

**Global Inventories:** All components of this product are listed or in compliance with the following chemical inventories:

Australian Inventory of Chemical Substances (AICS)

Canadian Domestic Substance List (DSL)

European Inventory of Existing Commercial Substances (EINECS)

Japanese Existing and New Chemical Substances (ENCS)

South Korea Toxic Chemical Control Law (TCCL) Existing Chemicals List (ECL)

Philippines Inventory of Chemicals and Chemical Substances (PICCS)

**California Proposition 65 RTK:** This product may contain trace chemicals not added as a part of the formulation but remaining as residuals from the manufacturing process of our raw materials suppliers, that are considered by the state of California to cause cancer: None Known

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

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

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

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



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## 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

**HMI S® 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

### Definitions

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

### EU Risk/Safety Phrases

Xi = Irritant

R36 = Irritating to eyes.

**Supersedes:** 04-30-2007

**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.