

Material Safety Data Sheet

214 Invisible Ink

SECTION 1 *Product Identification and General Information*

Distributors Name: VRS Marking Inc.
Distributors Address: 567 Camino Mercado Unit A, Arroyo Grande, CA 93420 USA
Product Information: 805-481-9787
Emergency Phone Number: 805-550-6119
Emergency Phone Number (outside of US): +1 805-550-6119
Product Numbers: 214 UV Ink
Date SDS Prepared: 09/24/2012

This SDS has been prepared for the purpose of Hazard Communications under 29 CFR 1910.1200.

SECTION 2 *Hazards Identification*

EMERGENCY OVERVIEW: FLAMMABLE LIQUID! May be harmful if swallowed or inhaled. Very hazardous in case of eye contact (irritant), of ingestion. Hazardous in case of skin contact (irritant, permeator), of inhalation. Inflammation of the eye is characterized by redness, watering, and itching. May cause irritation of respiratory tract. Vapors may cause drowsiness and dizziness. Vapors may cause drowsiness and dizziness. May form reactive peroxides.

Health Hazard Information (Acute and Chronic):

Eye Contact: Causes eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage.

Skin Contact: Skin contact may cause moderate irritation. Symptoms include redness, itching, and pain.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure.

Inhalation: Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration (Ethanol).

Primary Routes of Entry: Inhalation, skin absorption, skin contact, and eye contact.

Chronic Exposure: May cause reproductive and fetal effects (Ethanol). Laboratory experiments have resulted in mutagenic effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage.

Target Organs: Kidneys, heart, central nervous system, liver.

Pre-Existing Conditions: May aggravate persons with pre-existing skin disorders, digestive, liver, and kidney problems.

SECTION 3 *Composition/Information on Ingredients*

Contents	Percent by Weight	CAS No.	OSHA PEL	ACGIH TLV	LISTED CARCINOGEN (IARC/OSHA/NTP)
Ethanol	20% - 25%	64-17-5	1000 ppm	1000 ppm	No
Diacetone Alcohol	25% - 30%	123-42-2	50 ppm	50 ppm	No
2-Methoxy-2-Propanol	10% - 15%	107-98-2		100 ppm	No
Modified Polymers/Binders	5% - 10%	Proprietary			No
Dipropylene Glycol Monomethyl Ether	10% - 15%	34590-94-8	100 ppm	100 ppm	No
2-Propyloxyethanol	15% - 20%	2807-30-9			No

There is no toxicity data available for this mixture. The hazards associated with overexposure to this mixture are assumed to be due to exposure to the components.

SECTION 4***First Aid Procedures***

Eye Contact: Flush with copious amounts of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Call a physician immediately.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician immediately.

Ingestion: Inducing vomiting should only be performed under the direct supervision of medical personnel. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

SECTION 5***Fire-Fighting Measures***

Flash Point: <70°F

Fire and Explosion Hazards: Flammable Liquid. Dangerous fire hazard when exposed to heat or flame. Explosive peroxides may form on prolonged storage in contact with air and heat.

Extinguishing Media: Water spray, foam, dry chemical, carbon dioxide. Alcohol resistant foams (ATC) are preferred, if available.

Special Fire Fighting Procedures: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full face piece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire-exposed containers cool.

Unusual Fire and Explosion Hazards: This flammable liquid must be kept away from sparks, open flame, hot surfaces, and all sources of heat and ignition. Decomposition materials may emit acrid smoke and irritating fumes. Never use welding or cutting torch on or near drum (including empty) because product can ignite explosively.

SECTION 6***Accidental Release Measures***

Spill Procedure: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (i.e., vermiculite, dry sand, and earth), and place in a chemical waste container. Do not use combustible materials, such as sawdust. Do not flush to sewer! If leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

US Regulations (CERCLA) require reporting spills and releases to soil, water, and air in excess of reportable quantities.

SECTION 7***Handling and Storage***

Precautions: Protect against physical damage. Store in a cool, dry well-ventilated location, away from any area where the fire hazard may be acute. Separate from incompatibles. Containers should be bonded and grounded for transfers to avoid static sparks. Storage and use areas should be NO SMOKING areas. Use non-sparking tools and equipment, including explosion proof ventilation. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

Store product in carbon steel, stainless steel, or phenolic lined steel drums.

Do not store in aluminum, copper, galvanized iron, or galvanized steel.

SECTION 8 *Exposure Controls/Personal Protection*

Eye Protection: Use chemical safety glasses or goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Use explosion-proof equipment.

Respiratory Protection: Appropriate respiratory protection is required when exposure to airborne contaminant is likely to exceed acceptable limits. Respirators should be selected and used in accordance with OSHA Part 1910.134 and manufacturer's recommendations.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or overalls, as appropriate, to prevent skin contact. Check with your safety supplier for the proper chemical-resistant gloves.

SECTION 9 *Physical and Chemical Properties*

Appearance: Clear Liquid

Odor: Characteristic odor

Vapor Density: >1 (Air = 1)

Physical State: Liquid

Specific Gravity: >1 (Water = 1)

SECTION 10 *Stability and Reactivity*

Stability: Stable

Conditions to Avoid: Heat, flames, sparks, ignition sources and incompatibles.

Incompatibility (materials to avoid): Oxidizing materials.

Hazardous Decomposition Products: Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization: Will not occur.

SECTION 11 *Toxicological Information*

Toxicological Data: There is no available data for the product itself.

SECTION 12 *Ecological Information*

Environmental Toxicity: The ecological characteristics of this product have not been fully investigated. The product should not be allowed to enter drains or water courses or be deposited where it can affect ground or surface waters. Do not discharge product into the environment.

SECTION 13 *Disposal Considerations*

Waste Disposal Method: Recovered non-usable material may be regulated as a hazardous waste due to its ignitability and/or its toxic characteristics. It is the responsibility of the user to determine if the material is a RCRA "hazardous waste" at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations. State and/or local regulations may be more restrictive.

SECTION 14 *Transport Information*

USDOT and IMDG Regulations

Proper Shipping Name – UN1210, Printing Ink, 3, PG II
Hazard Class – 3 (Flammable Liquid)
Identification Number – UN1210
Label Required – Flammable

IATA Regulations

Proper Shipping – UN1210, Printing Ink, 3, PG II

SECTION 15 *Regulatory Information*

Toxic Substances Chemical Inventory (TSCA): This product (and/or all of its components) is in compliance with USEPA TSCA.

SECTION 16 *Other Information*

HMIS Hazard Rating: Health – 2; Fire – 3; Reactivity – 0; PPE – Goggles & Shield; Apron; Proper Gloves; Fire Extinguisher

MSDS Preparation Date: 9/24/2012

DISCLAIMER:

The information accumulated herein is believed to be accurate and represents the best data available. It is the user's responsibility to determine suitability of use. No warranty, expressed or implied, is made. VRS Marking assumes no legal responsibility or liability from its use. Materials comprising <1% by weight, or 0.1% by weight if the chemical is a carcinogen are not listed herein.