

MSDS

214 Ink

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 214 Ink
COLORS: All Colors

MANUFACTURER: HITT Marking Devices
ADDRESS: a division of The Hitt Companies, Inc.
3231 W. MacArthur Blvd.
Santa Ana, CA 92704

EMERGENCY PHONE (24hr): 800-969-6699

OTHER CALLS: 714-979-1405

FAX PHONE: 714-979-1407

PREPARED BY: Ken Hitt

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

<u>Ingredient</u>	<u>CAS NO.</u>	<u>% VOL</u>	<u>SARA 313 Reportable</u>	<u>Exposure Limit ACGIH-TLV</u>	<u>Exposure Limit OSHA PEL</u>
Cellosolve Solvent	110-80-5	3-5	Yes	5 ppm	200 ppm
Cellosolve Acetate	111-15-9	10-20		5 ppm	200 ppm
Diacetone Alcohol	123-42-2	10-20		50 ppm	50 ppm
Methyl Carbitol	111-77-3	10-20		5 ppm	25 ppm
Ethyl Alcohol	64-17-5	5-15		1000 ppm	1000 ppm

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Do not get in eyes, on skin or clothing. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

ROUTES OF ENTRY: Dermal contact. Eye contact. Inhalation. Ingestion.

POTENTIAL ACUTE HEALTH EFFECTS

EYES: Irritation to eyes

SKIN: Irritation to skin

INGESTION: May cause nausea and or vomiting

INHALATION: May be toxic by inhalation. Irritation to the respiratory system.

SECTION 4: FIRST AID MEASURES

EYES: Affected individual should remove contact lens, if present. In case of contact with eyes, rinse immediately with plenty of water or saline solution. Get medical attention if irritation occurs.

SKIN: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation occurs.

INGESTION: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately

INHALATION: If inhaled, remove to fresh air. Get medical attention if symptoms appear. If exposed person is not breathing, give artificial respiration or oxygen applied by trained personnel.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR, UPPER: 14.0
(% BY VOLUME) LOWER: 1.5

FLASH POINT: 120 F
METHOD USED: Closed cup

AUTOIGNITION TEMPERATURE: 715 F

NFPA HAZARD CLASSIFICATION

HEALTH: 2 FLAMMABILITY: 2 REACTIVITY: 0

HMIS HAZARD CLASSIFICATION

HEALTH: 1 FLAMMABILITY: 2 REACTIVITY: 0
PROTECTION: B

EXTINGUISHING MEDIA: Carbon dioxide. Dry chemical. Alcohol Foam. Water spray.

SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should wear appropriate protective equipment and self contained breathing apparatus (SCBA) with a full facepiece operated in positive pressure mode.

SECTION 5 NOTES: Avoid heat, sparks and open flame. Slightly flammable to flammable in presence of heat. Use an extinguishing agent suitable for surrounding fires .

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Remove sources of ignition. Ventilate.

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

METHODS FOR CLEANING UP:

Small spill and leak: Absorb with an inert material and place in an appropriate waste disposal container.

Large spill and leak: Contain and cover spill with an absorbent material. Collect and dispose in chemical waste drum. Use appropriate containment to avoid environmental contamination. Place spilled material in an appropriate container for disposal.

SECTION 7: HANDLING AND STORAGE

HANDLING: Do not ingest. Do not get in eyes, on skin or on clothing. Keep container closed. Use only with adequate ventilation. Do not breathe vapor or mist. Wash thoroughly after handling.

STORAGE: Keep container tightly closed. Keep container in a cool, well ventilated area.

STORAGE TEMPERATURE: 60-80 F

SHELF LIFE: 9 months from date of manufacture

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location

PERSONAL PROTECTION:

RESPIRATORY PROTECTION: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

EYE PROTECTION: Safety eyewear complying with an approved standard should be use when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

SKIN PROTECTION: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

PERSONAL PROTECTION IN CASE OF LARGE SPILL: Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

EXPOSURE GUIDELINES: See section 2

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE AND APPEARANCE: Liquid

ODOR: Mild

BOILING POINT: 336 F

MELTING POINT: -130 F

VAPOR PRESSURE (mmHg): <1

VAPOR DENSITY (AIR = 1): 4.0

SPECIFIC GRAVITY (H₂O = 1): .9605

REACTIVITY IN WATER: None

SOLUBILITY IN WATER: Slight

VOLATILE ORGANIC COMPOUNDS: 35.84 grams/liter

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID (STABILITY): Heat, sparks and open flame

INCOMPATIBILITY (MATERIAL TO AVOID): Strong oxidizing agents

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Burning may produce CO and CO₂

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID (POLYMERIZATION): None

SECTION 11: TOXICOLOGICAL INFORMATION

CELLOSOLVE SOLVENT: Oral rat LD₅₀: 2125 mg/kg; inhalation rat LC₅₀: 2000 ppm/7H; irritation eye rabbit, standard Draize: 50 mg moderate; skin rabbit, standard Draize: 500 mg open mild; investigated as a tumorigen, mutagen, reproductive effector. In laboratory animals, this compound has caused both birth defects and damage to the reproductive system. Exposure to this compound has also caused decreased sperm counts in humans.

METHYL CARBITOL TOXICOLOGICAL INFORMATION: Oral rat LD₅₀: 2370 mg/kg; inhalation rat LC₅₀: 1500 ppm/7H; skin rabbit LD₅₀: 1280 mg/kg.

DIACETONE ALCOHOL TOXICOLOGICAL INFORMATION: Oral rat LD₅₀> 2000mg/kg; inhalation rat LC₅₀ greater than near saturated vapour concentration/ 1H, dermal rabbit LD₅₀> 2000mg/kg

ETHYL ALCOHOL TOXICOLOGICAL INFORMATION: Oral rat LD₅₀: 5800mg/kg; inhalation rat LC₅₀: 16000 mg/l

CELLOSOLVE ACETATE TOXICOLOGICAL INFORMATION: *Acute Toxicity* – Ingestion; LD₅₀, Rat 1,600 - 7,250 mg/kg
LD₅₀, Mouse 2,830 - 3,200 mg/kg. Skin Absorption; LD₅₀, Rabbit 1,535 mg/kg. *Repeated Dose Toxicity* - In animals, effects have been reported on the following organs: Kidney.

Effects of chronic exposure: Skin and eye irritant. Injury to blood cells, liver and kidneys.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL TOXICITY

CELLOSOLVE SOLVENT:

The LC₅₀/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

METHYL CARBITOL:

The LC₅₀/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

DIACETONE ALCOHOL:

The LC₅₀/96-hour values for fish are over 100 mg/l. This material is not expected to be toxic to aquatic life.

ETHYL ALCOHOL:

Fish: Fathead Minnow 96 hr. LC 50: 15300 mg/l

CELLOSOLVE ACETATE:

Fish Acute & Prolonged Toxicity

LC₅₀, fathead minnow (*Pimephales promelas*): 5 - 44 mg/l

LC₅₀, rainbow trout (*Oncorhynchus mykiss*), 96 h: 20 - 40 mg/l

LC50, golden orfe (*Leuciscus idus*), 48 h: 80 mg/l
Aquatic Invertebrate Acute Toxicity
LC50, water flea *Daphnia magna*, static, 48 h: 142 mg/l
EC50, water flea *Daphnia magna*, 48 h, immobilization: 37 - 180 mg/l
Aquatic Plant Toxicity
EC50, green alga *Selenastrum capricornutum*, biomass growth inhibition, 72 h: 520 mg/l
EC50, alga *Scenedesmus* sp., Growth inhibition (cell density reduction), 72 h: > 500 mg/l
Toxicity to Micro-organisms
IC50; activated sludge, respiration inhibition, 30 min: 900 mg/l
EC50; bacteria, Growth inhibition (cell density reduction), 18 h: 2,800 mg/l

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. The user of this material has the responsibility to dispose of container and unused contents in accordance with federal, state and local requirements.

SECTION 14: TRANSPORT INFORMATION

Refer to the following when using the below information and reshipping Inks and Thinners:

**FLASH POINT 73 – 149 (HAZARDOUS BY GROUND IN 5 GALLON CONTAINER)
FLASHPOINT UNDER 73 (HAZARDOUS BY GROUND IN QUART OR LARGER CONTAINER) AND FLASHPOINT 149 OR UNDER (HAZARDOUS BY AIR IN ANY UNIT OF MEASURE)**

If size deems shipment hazardous, below markings are required

U.S. DEPARTMENT OF TRANSPORTATION (LAND, D.O.T.) PROPER SHIPPING NAME: 141 Pigment Ink
HAZARD CLASS: 3
ID NUMBER: 1210
PACKING GROUP: III

WATER TRANSPORTATION (WATER, I.M.O.) PROPER SHIPPING NAME: 141 Pigment Ink
HAZARD CLASS: 3
ID NUMBER: 1993
PACKING GROUP: III

AIR TRANSPORTATION (AIR, I.C.A.O.) PROPER SHIPPING NAME: 141 Pigment Ink
HAZARD CLASS: 3
ID NUMBER: 1210
PACKING GROUP: III

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: Cellosolve Solvent is subject to reporting requirements of SARA Title III, Section 313 of the Emergency Planning Community Right to Know Act of 1986 and of 40 CFR 372. This product is in compliance with the EPA TSCA inventory.

STATE REGULATIONS: California Safe Drinking Water Act (Prop 65) Listing: "WARNING: This product contains a chemical known to the State of California to cause cancer and/or birth defects or other reproductive harm"

SECTION 16: OTHER INFORMATION

OTHER INFORMATION: The hazards listed on this MSDS are taken from the MSDS for each of the ingredients in this mixture. In most cases, the maximum form of hazard is represented here. The TLV's represent the conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse effect. It must be remembered that each individual reacts differently and some may experience discomfort while others do not. This MSDS is presented so that each individual will have the information to deal safely with the use of this product. All material's TSCA listed.

DATE PREPARED: October 10, 2014

THE INFORMATION ON THIS MSDS SUPERCEDES ANY PREVIOUSLY DATED MSDS

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