



MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Identification

Product Name: SolaChrome UV[®] Ink
Commonly used in the following printer(s):
DisplayMaker 72UVR

Product Number: 0901147 series part number

Chemical Name: UV-curable Inkjet Printing Fluid
Chemical Family: Acrylate/Polymer/Pigment Blend
CAS Number: Blend

Company Identification

MacDermid ColorSpan Corporation
7090 Shady Oak Road
Eden Prairie, MN 55344 USA

In case of exposure, please contact local Poison Control Center
Emergency phone for spills, leaks, fire, exposure or accident call
CHEMTREC: 1-800-424-9300 or 1-703-527-3887
Product information: (800) 925-0563
Revision Date: 09/23/04

2. COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS	CAS No.	CONTENTS	EINECS	SYMBOL	RISK No.
2-BENZYL-2-DIMETHYLAMINO-4-MORPHOLINOBUTYROPHENONE	119313-12-1	0-1 %	404-360-3	N	50/5
SUBSTITUTED PHOSPHINE OXIDE	75980-60-8	1-5 %		Xn	52/53,62
MULTIFUNCTIONAL ACRYLATE NOS		10-30 %		Xi	36/38
VINYLCAPROLACTAM	2235-00-9	10-30 %	218-787-6	Xn	22,36
ACRYLIC ACID, MONOALKYL, -ARYL OR -ALKYLARYL (ESTERS OF NOS)		10-30 %		Xi,N	36/37/38
					51/5

3. HAZARDS IDENTIFICATION

Irritating to eyes, respiratory system and skin. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazardous Materials Identification System (HMIS) Codes:

Health Hazard (Blue): 2
Flammability Hazard (RED): 0
Physical Hazard (Yellow): 1
Personal Protection Equipment: B - eye protection and gloves

4. FIRST AID MEASURES

EYES: Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eyelids. Continue to rinse for at least 15 minutes and get prompt medical attention.

SKIN CONTACT: Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water for several minutes. Continue to rinse for at least 15 minutes. Get prompt medical attention if irritation persists after washing.

INGESTION: Rinse mouth thoroughly. Drink plenty of water. DO NOT induce vomiting. Get medical attention immediately.

INHALATION: Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. If respiratory problems, artificial respiration/oxygen. Keep the affected person warm and at rest. Get prompt medical attention.

GENERALITIES: Give nothing by mouth to an unconscious person. If breathing is irregular or has stopped, give artificial respiration. In all cases of doubt or if symptoms persist, seek medical attention and show this sheet to the doctor.

ANTIDOTE: No specific antidote exists. Treat symptomatically.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Powder, Foam, Carbon dioxide (CO₂). DO NOT use water if avoidable.

SPECIAL FIRE FIGHTING PROCEDURES: Use water spray only to cool containers! Do not put water on leaked material. Avoid water in straight hose stream; will scatter and spread fire.

UNUSUAL FIRE & EXPLOSION HAZARDS: Generates massive smoke during fire.

CONDITIONS OF FLAMMABILITY: Heat, sparks, or flame.

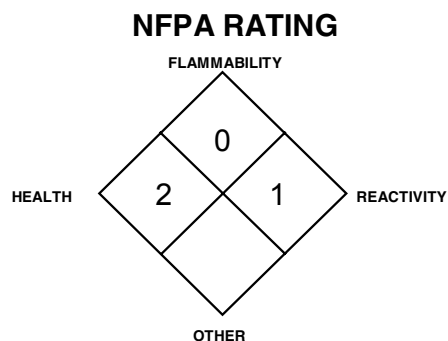
UPPER FLAMMABLE LIMIT: Not available.

LOWER FLAMMABLE LIMIT: Not available.

AUTO-IGNITION TEMPERATURE: Not available.

EXPLOSION DATA - SENSITIVITY TO MECHANICAL IMPACT: Not available.

EXPLOSION DATA - SENSITIVITY TO STATIC DISCHARGE: Not available.



6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS DURING SPILL: Wear necessary protective equipment to avoid contact with skin or eyes. Avoid breathing vapors.

ENVIRONMENTAL PRECAUTIONS: Do not allow to enter drains or effluent systems.

SPILL CLEANUP METHODS: Clean-up personnel should use respiratory and/or liquid contact protection. Ventilate. Collect and contain spilled material in a chemical absorbent (clay-based material, universal binder, etc.).

7. HANDLING AND STORAGE

HANDLING: Avoid any contact with skin and eyes. Avoid breathing vapors, ventilate well. Use approved respirator if air contamination is above accepted level. Wear splash goggles, multi-layer gloves and also an apron when handling large quantities.

STORAGE: Keep containers tightly closed in a cool, dry, ventilated area. Store away from traffic. Protect from light including direct sun light. Store isolated from oxidizing materials, acids, and alkalis. Avoid storing for very long time periods. Storage temperature: Standard room temperature (68 degrees Fahrenheit).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:

PROCESS CONTROL MEASURES: Provide eyewash station.

VENTILATION: Provide adequate general and local exhaust ventilation. No specific recommendation, but respirator protection may be required under exceptional circumstances when excessive air contamination exists.

PROTECTIVE GLOVES: Appropriate protective gloves must be used if there is a risk of direct contact or splash.

EYE PROTECTION: Wear splash-proof eye goggles to prevent any possibility of eye contact. Available emergency eyewash station is recommended.

OTHER PROTECTION: Wear appropriate clothing to prevent any possibility of liquid contact.

WORK/HYGIENIC PRACTICES: Avoid contamination of food, drink, etc. No smoking when handling. Wash at the end of each work shift and before eating. Promptly remove any clothing that becomes contaminated. Isolate contaminated clothing and wash before reuse. Use appropriate skin cream to prevent drying of skin.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

COLOR: Cyan, Magenta, Yellow, or Black

ODOR: Characteristic

ODOR THRESHOLD: Not available.

pH VALUE: Not applicable. Product does not dissociate in water

SOLUBILITY: Soluble in most organic solvents. Not readily soluble in water.

SOLUBILITY VALUE (g/100g H₂O/20°C): <10

COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available.

SPECIFIC GRAVITY (Water=1): 1.02 - 1.1 @ 25 °C

VAPOR DENSITY (air=1): >1

VAPOR PRESSURE: <1mmHg @ 25 °C

EVAPORATION RATE: <0.05 (BuAc=1)

VISCOSITY: 10 - 30 cps @ 25 °C

FREEZING POINT: Not available.

BOILING POINT (°C): >100 @ 760mmHg

FLASH POINT (°C): >95 FLASH POINT METHOD: Closed cup

10. STABILITY AND REACTIVITY

STABILITY: Normally stable. Avoid heat, sparks, flames.

CONDITIONS TO AVOID: Will react violently with free radical initiators, strong oxidizing agents, and strong alkalis.

HAZARDOUS POLYMERIZATION: May polymerize.

HAZARDOUS DECOMPOSITION PRODUCTS: Fire creates carbon monoxide (CO) and Carbon Dioxide (CO₂).

11. TOXICOLOGICAL INFORMATION

HEALTH HAZARDS, GENERAL: Acrylate components have irritant properties. Prolonged or repeated contact with skin or mucous membranes may result in irritant symptoms such as redness, blistering or dermatitis. Symptoms may be delayed.

SKIN: Irritating to skin.

EYES: Irritating to eyes.

TOXICITY DATA:

SENSITIZATION TO PRODUCT: Not available.

CARCINOGENICITY: Not available.
REPRODUCTIVE TOXICITY: Not available.
TERATOGENICITY: Not available.
MUTAGENICITY: Not available.
NAME OF TOXICOLOGICALLY SYNERGISTIC PRODUCTS: Not available.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: Dangerous to the environment. May cause long-term effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

The advice in this paragraph is of a general nature only. This product must be disposed of via a licensed contractor and shall be disposed of in accordance with federal, provincial, state, and local environmental control regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Do not allow this strongly colored product to enter an effluent system. Dispose of containers as special waste.

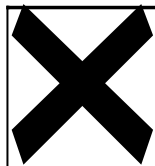
GENERAL/CLEANING: Refer to Section 7 before handling the product or containers.
European Waste Catalogue Number (EWC) 08 03 12

14. TRANSPORTATION INFORMATION

GENERAL: Not regulated.

15. REGULATORY INFORMATION

LABEL FOR SUPPLY:



IRRITANT

16. OTHER INFORMATION

RISK PHRASES:

R-22 Harmful if swallowed.
R-36 Irritating to eyes.
R-37 Irritating to respiratory system.
R-38 Irritating to skin.
R-50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R-52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R-62 Possible risk of impaired fertility.

SAFETY PHRASES:

S-24/25 Avoid contact with skin and eyes.
S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S-36/37 Wear suitable protective clothing and gloves.
S-60 This material and its container must be disposed of as hazardous waste.

EC DIRECTIVES: Dangerous Preparations Directive 1999/45 and its amendments. System of specific information relating to Dangerous Preparations 91\155.

UK REGULATORY REFERENCES: Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (CHIP 3), S.I. 2002 No. 1689. Water Resources Act 1991. Special Waste Regulations 1996.

The data in this Material Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material or in any process. The information contained herein is based upon data obtained from the manufacturer and/or recognized technical sources. This information is believed to be correct, but does not purport to be all-inclusive and shall be used only as a guide. Since the condition of handling and use are beyond our control, MacDermid ColorSpan Corporation assumes no liability for loss or injury resulting from the use of this product or the information herein. All chemicals may present unknown health hazards and should be used with caution. No representation or warranties, either expressed or implied, of merchantability, fitness for a particular purpose or any other nature are made hereunto with respect to the information contained herein or the product to which the information refers. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions and/or compliance with federal, provincial, state, and local laws and regulations.