



Material Safety Data Sheet

Prepared in accordance with ISO 11014-1/ANSI standard Z400.1-2004

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1. PRODUCT AND COMPANY IDENTIFICATION

Product code Product name Product description 4002492118

Special 18 Dark Blue Stig

1800 PowerPrint® Plus UV Screen Ink

Manufacturer or supplier's details UNITED STATES

Nazdar Company 8501 Hedge Lane Terrace Shawnee, KS 66227

Tel: 1-913-422-1888 Tel: 1-800-677-4657 Fax: 1-913-422-2294 UNITED KINGDOM Nazdar Limited 7 Barton Road

Heaton Mersey Industrial Estate Stockport, Chesire SK4 3EG

Tel: +44 161 442 2111

Emergency Telephone Number

USA: Chemtrec: 1-800-424-9300 Outside USA: Chemtrec: 1-703-527-3887

Website: www.nazdar.com

MSDS Information: 1-913-422-1888 ext 2305 MSDS Contact: Regulatory Compliance

email: regcomp@nazdar.com

2. HAZARDS IDENTIFICATION

This product is a preparation. Health hazard information is based on its components.

Appearance

Emergency Overview

Viscous liquid

Irritant. Sensitizer.

Eyes

Moderately irritating to the eyes. The liquid splashed in the eyes may cause irritation and

reversible damage.

Skin

Moderate skin irritation. Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

May be harmful if absorbed through skin.

Inhalation

May cause irritation of respiratory tract. Inhalation of high vapour concentrations may cause

symptoms like headache, dizziness, tiredness, nausea and vomiting.

Ingestion

Ingestion may cause irritation to mucous membranes.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Glycol ether acrylate	Trade Secret	10 - 30
Vinyl Functional Monomer	Trade Secret	10 - 30
Acrylated Monomer	Trade Secret	5 - 10
Acrylated Monomer	Trade Secret	5 - 10
Copper Phthalocyanine Compound	Trade Secret	1 - 5
Photoinitiator	Trade Secret	1-5
Photoinitiator	Trade Secret	1-5
Silicon Dioxide	7631-86-9	1-5
Carbon black	1333-86-4	< 1

4. FIRST AID MEASURES

Eye Contact

May produce an allergic reaction. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin Contact

May cause allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. Wash off immediately with soap and plenty of water. Use a mild soap if available. Rinse immediately with plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation develops, get medical attention.

Move to fresh air. If breathed in, move person into fresh air. If breathing is irregular or Inhalation

stopped, administer artificial respiration. Get medical attention immediately.

May produce an allergic reaction. If swallowed, DO NOT induce vomiting. Call a physician or Ingestion

Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flammable Properties No information available

Suitable Extinguishing Media Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that

are appropriate to local circumstances and the surrounding environment.

Protective Equipment and **Precautions for Firefighters** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Keep away from fire, sparks and heated surfaces. Keep container tightly closed. Cool containers / tanks with water spray. Polymerization is a highly exothermic reaction and may generate sufficient heat to cause thermal decomposition and/or rupture containers. To avoid thermal decomposition, do not

overheat. Fire or intense heat may cause violent rupture of packages.

Specific Hazards Arising from the Chemical

May cause sensitization by skin contact. Thermal decomposition can lead to release of irritating gases and vapours. Burning produces obnoxious and toxic fumes.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Remove all sources of ignition. Heat, flames and sparks. Ventilate the area. Avoid breathing

dust or vapor. Avoid contact with skin, eyes and clothing. Evacuate personnel to safe areas.

Keep people away from and upwind of spill/leak.

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, Methods for Cleaning Up

diatomaceous earth, vermiculite) and transfer to a container for disposal according to local /

national regulations (see section 13). Do not use sparking tools.

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If **Environmental Precautions**

the product contaminates rivers and lakes or drains inform respective authorities.

7. HANDLING AND STORAGE

Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove and wash Handling contaminated clothing before re-use. Discard contaminated shoes. When using do not

smoke. Take notice of labels and material safety data sheets for the working chemicals. Do

not take internally. Harmful or fatal if swallowed.

Keep at temperatures between 9.9°C and 31.9°C. Keep container closed when not in use. Storage

Keep out of the reach of children. Keep away from direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Ontario TWAEV	Mexico OEL (TWA)
Copper Phthalocyanine Compound			100 mg/m ³		
Silicon Dioxide			3000 mg/m ³		
Carbon black	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³	1750 mg/m ³	TWA: 3.5 mg/m ³	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³

Engineering Measures

Use only with adequate ventilation. Use ventilation adequate to keep exposures below recommended exposure limits. See MSDS. In case of insufficient ventilation, wear suitable respiratory equipment.

Personal Protective Equipment

Respiratory Protection

Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust). Respirator with a vapour filter.

Eye Protection Skin Protection Ensure that eyewash stations and safety showers are close to the workstation location. Avoid

contact with eyes. Safety glasses with side-shields. Goggles. Face-shield.

Wear protective gloves/clothing. Solvent-resistant apron and boots.

General Hygiene Considerations

Handle in accordance with good industrial hygiene and safety practice. Ensure that eyewash stations and safety showers are close to the workstation location. Wash hands before eating, drinking, or smoking. Remove and wash contaminated clothing before re-use. Regular cleaning of equipment, work area and clothing. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Odor

pH

Boiling point/Boiling Range Freezing Point/Range **Evaporation Rate**

Flammability (solid, gas)

Vapour Pressure

Mild Sweet Acrylic No information available >149°C / >300°F

No information available No information available

Viscous liquid

No information available

No information available

Flammability Limits in Air Upper No information available

Lower No information available

Physical State Liquid Odor Threshold No information available

Autoignition Temperature Melting Point/Range

Solubility Partition Coefficient (noctanol/water)

Vapour Density

No information available No information available No information available

No information available

Flash Point > 93°C / > 200°F

Method

Pensky Martens Closed Cup (PMCC)

1.096

0.44

4.825

Heavier than air

Photochemically Reactive No

Weight Per Gallon (lbs/gal) 9.143 VOC by weight % 0.44 VOC lbs/gal (less water) 0.04

Specific Gravity VOC by volume % VOC grams/liter (less water)

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions.

Conditions to Avoid

Temperatures above 93°C. Keep away from direct sunlight.

Incompatible Products

Strong acids. Strong bases. Strong oxidizing agents. Reducing agents.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapours. Carbon dioxide (CO2). Carbon monoxide.

Possibility of Hazardous Reactions

None under normal processing. Do not store for longer periods at temperatures above 93°C.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycol ether acrylate	4660 μL/kg (Rat)	2540 µL/kg (Rabbit)	
Acrylated Monomer	5 g/kg (Rat)	3600 µL/kg (Rabbit)	
Acrylated Monomer	5190 µL/kg (Rat)	5000 mg/kg (Rabbit)	
Silicon Dioxide	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.2 mg/l (Rat) 1 h

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Carbon black	15400 mg/kg (Rat)	3 g/kg (Rabbit)	

Chronic Toxicity

Component	ACGIH	IARC	NTP	OSHA
Carbon black		Group 2B		X

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B). In their evaluation of carbon black, IARC indicates exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

IARC: (International Agency for Research on Cancer) OSHA: (Occupational Safety & Health Administration) Group 2B - Possibly Carcinogenic to Humans

X - Present

Sensitisation

May cause sensitization of susceptible persons.

Mutagenic Effects
Reproductive Effects
Developmental Effects

No information available No information available No information available

Developmental Effects Teratogenicity

No information available

No information available

Chronic Effects

Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated

exposure.

Target Organ Effects

Eyes, Kidney, Liver, Respiratory system, Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

We have no quantitative data concerning the ecological effects of this product. Should not be released into the environment.

Component	Freshwater Algae	Freshwater Fish	Water Flea
Silicon Dioxide	72 Hr EC50 Selenastrum	96 Hr LC50 Brachydanio rerio: 5000	48 Hr EC50 Ceriodaphnia dubia: 7600
	capricornutum: 440 mg/L	mg/L [static]	mg/L
Carbon black			24 Hr EC50 Daphnia magna: >5600
			mg/L

Persistence and Degradability

Bioaccumulation

No information available No information available

Mobility in Environmental Media

No information available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Dispose of contents/container in accordance with local regulation.

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or

disposal.

14. TRANSPORT INFORMATION

DOT

Printing Ink, Not Regulated

ICAO/IATA

Not classified as dangerous in the meaning of transport regulations

IMDG/IMO

Not classified as dangerous in the meaning of transport regulations

15. REGULATORY INFORMATION

International Inventories

Listed on TSCA. For further information, please contact: Manufacturer, importer, supplier

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Glycol ether acrylate	Trade Secret	10 - 30	1.0

The above glycol ether acrylate is considered a reactive chemical in ultraviolet curable inks. Once initiated by a high dose of ultraviolet light, this glycol ether acrylate rapidly polymerizes (i.e. hardens) and becomes part of the ink film. The polymerization process of UV curable inks is measured in milliseconds

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Component	CAS-No	Weight %
Glycol ether acrylate	Trade Secret	10 - 30

U.S. State Regulations

California Prop. 65

WARNING! This product contains a chemical known in the State of California to cause cancer. WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

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	Component	CAS-No	Weight %				
	Carbon black	1333-86-4	<1				

State Right-to-Know

Component	Minnesota	Florida	New Jersey	Pennsylvania	Massachusetts	Rhode Island
Glycol ether acrylate	Not Listed	Not Listed	X	X	Not Listed	Not Listed
Vinyl Functional Monomer	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Acrylated Monomer	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Acrylated Monomer	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Copper Phthalocyanine Compound	Not Listed	Not Listed	Х	Х	Not Listed	Not Listed
Photoinitiator	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Photoinitiator	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Silicon Dioxide	Not Listed	Not Listed	Not Listed	X	X	Not Listed
Carbon black	Not Listed	Not Listed	X	X	X	X

Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

Component	WHMIS Classifications of Components
Acrylated Monomer	D2B
Acrylated Monomer	D2B
Silicon Dioxide	Uncontrolled product according to WHMIS classification criteria
Carbon black	D2A

Component	NPRI - National Pollutant Release Inventory
Copper Phthalocyanine Compound	Part 1, Group 1 Substance

REACH: Substances of Very High Concern (SVHC): Article 57 of Regulation (EC) No 1907/2006

Does NOT contain a listed substance

HMIS:

Health 2 Flammability

Reactivity 1 PPE X

16. OTHER INFORMATION

Revision Date

Jun-17-2011

Revision Summary

New MSDS format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of MSDS