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 **5186**
Product name **Blue Toner (GS)**
Product description VersaCon® Classic 5100 Series Container 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 Viscous liquid.
Flammable Properties Combustible liquid and vapor.
Emergency Overview Harmful. Irritant. Sensitizer. May cause drowsiness and dizziness.

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

Skin May cause skin irritation and/or dermatitis. 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 Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Ingestion Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
n-Butyl alcohol	71-36-3	10 - 30
Dipropylene Glycol Monomethyl Ether	34590-94-8	5 - 10
Ethylene glycol monopropyl ether	2807-30-9	5 - 10
Copper Phthalocyanine Compound	Trade Secret	5 - 10
2-Butoxyethanol	111-76-2	5 - 10
Phosphoric acid, dibutyl ester	107-66-4	1 - 5
Formaldehyde	50-00-0	< 0.5

4. FIRST AID MEASURES

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.

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.

Inhalation Move to fresh air. If breathed in, move person into fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.

Ingestion May produce an allergic reaction. If swallowed, DO NOT induce vomiting. Call a physician or Poison Control Centre immediately. Never give anything by mouth to an unconscious person.

5. FIRE-FIGHTING MEASURES

Flammable Properties Combustible liquid and vapor.

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. 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.

Methods for Cleaning Up Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not use sparking tools.

Environmental Precautions Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.

7. HANDLING AND STORAGE

Handling Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove and wash 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.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep out of the reach of children. Keep away from heat and sources of ignition. Take notice of the directions of use on the label.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	Weight %	ACGIH TLV	OSHA PEL	Ontario TWAEV
n-Butyl alcohol	10 - 30	TWA: 20 ppm	50 ppm Ceiling 150 mg/m^3 Ceiling Skin TWA: 300 mg/m^3 TWA: 100 ppm	TWA: 20 ppm
Dipropylene Glycol Monomethyl Ether	5 - 10	TWA: 100 ppm Skin STEL: 150 ppm	TWA: 600 mg/m^3 TWA: 100 ppm STEL: 150 ppm STEL: 900 mg/m^3 Skin	TWA: 100 ppm TWA: 605 mg/m^3 STEL: 150 ppm STEL: 910 mg/m^3

Component	Weight %	ACGIH TLV	OSHA PEL	Ontario TWAEV
Ethylene glycol monopropyl ether	5 - 10			TWA: 25 ppm TWA: 110 mg/m^3 Skin
2-Butoxyethanol	5 - 10	TWA: 20 ppm	TWA: 120 mg/m^3 TWA: 25 ppm Skin TWA: 50 ppm TWA: 240 mg/m^3	TWA: 20 ppm Skin
Phosphoric acid, dibutyl ester	1 - 5	TWA: 1 ppm STEL: 2 ppm	TWA: 1 ppm TWA: 5 mg/m^3 STEL: 10 mg/m^3 STEL: 2 ppm	TWA: 1 ppm TWA: 8.6 mg/m^3 STEL: 17 mg/m^3 STEL: 2 ppm
Formaldehyde	< 0.5	Ceiling: 0.3 ppm	5 ppm Ceiling TWA: 3 ppm STEL: 10 ppm TWA: 0.75 ppm STEL: 2 ppm	STEL: 1.0 ppm CEV: 1.5 ppm

Component	Weight %	NIOSH IDLH	Mexico OEL (TWA)
n-Butyl alcohol	10 - 30	1400 ppm 10% LEL	Peak: 150 mg/m^3 Peak: 50 ppm
Dipropylene Glycol Monomethyl Ether	5 - 10	600 ppm	TWA: 100 ppm TWA: 60 mg/m^3 STEL: 150 ppm STEL: 900 mg/m^3
Copper Phthalocyanine Compound	5 - 10	100 mg/m^3	
2-Butoxyethanol	5 - 10	700 ppm	TWA: 120 mg/m^3 TWA: 26 ppm STEL: 360 mg/m^3 STEL: 75 ppm
Phosphoric acid, dibutyl ester	1 - 5	30 ppm	TWA: 1 ppm TWA: 5 mg/m^3 STEL: 2 ppm STEL: 10 mg/m^3
Formaldehyde	< 0.5	20 ppm	Peak: 2 ppm Peak: 3 mg/m^3

NIOSH IDLH: Immediately Dangerous to Life or Health

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 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.

Skin Protection 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

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Appearance	Viscous liquid	**Physical State**	Liquid
Odor	Characteristic	**Odor Threshold**	No information available
pH	No information available	**Autoignition Temperature**	No information available
Boiling point/Boiling Range	>149°C / >300°F	**Melting Point/Range**	No information available
Freezing Point/Range	No information available	**Solubility**	No information available
Evaporation Rate	No information available	**Partition Coefficient (n-octanol/water)**	No information available
Vapour Pressure	No information available	**Vapour Density**	Heavier than air
Flammability (solid, gas)	No information available		

Flammability Limits in Air

Upper No information available
Lower No information available

Flash Point 39°C / 102°F
Method Pensky Martens Closed Cup (PMCC)

Photochemically Reactive No

Weight Per Gallon (lbs/gal)	8.823	**Specific Gravity**	1.06
VOC by weight	42.982	**VOC by volume**	46.17
VOC lbs/gal	3.796	**VOC grams/liter**	454.872

10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal conditions.

Conditions to Avoid Heat, flames and sparks.

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.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
n-Butyl alcohol	790 mg/kg (Rat)	3400 mg/kg (Rabbit)	8000 ppm (Rat) 4 h 17.7 mg/L (Rat) 4 h
Dipropylene Glycol Monomethyl Ether	5230 mg/kg (Rat)	9500 mg/kg (Rabbit)	
Ethylene glycol monopropyl ether	3089 mg/kg (Rat)	960 µL/kg (Rabbit)	
2-Butoxyethanol	470 mg/kg (Rat)	2270 mg/kg (Rat) 220 mg/kg (Rabbit)	2.21 mg/L (Rat) 4 h 450 ppm (Rat) 4 h
Phosphoric acid, dibutyl ester	3200 mg/kg (Rat)		
Formaldehyde	500 mg/kg (Rat)		0.578 mg/L (Rat) 4 h

Chronic Toxicity

Component	ACGIH	IARC	NTP	OSHA
2-Butoxyethanol	A3			
Formaldehyde	A2	Group 1	Reasonably Anticipated	X

Legend:

ACGIH: (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)
Reasonably Anticipated to be a Human Carcinogen

OSHA: (Occupational Safety & Health Administration) *X - Present*

Sensitisation	May cause sensitization of susceptible persons.
Mutagenic Effects	No information available
Reproductive Effects	No information available
Developmental Effects	No information available
Teratogenicity	No information available
Chronic Effects	Repeated contact may cause allergic reactions in very susceptible persons. Avoid repeated exposure. Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effect, such as mucous membrane and respiratory system irritation and adverse effect on kidney, liver and central nervous system.
Target Organ Effects	Blood, Central nervous system, Eyes, Hematopoietic System, Kidney, Liver, Respiratory system, Skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

We have no quantitative data concerning the ecological effects of this product. Environmental fate information is derived from consideration of the properties of the ingredients. Should not be released into the environment.

Component	Freshwater Algae	Freshwater Fish	Water Flea
n-Butyl alcohol	96 Hr EC50 Scenedesmus subspicatus: >500 mg/L; 72 Hr EC50 Scenedesmus subspicatus: >500 mg/L	96 Hr LC50 Pimephales promelas: 1730-1910 mg/L [static]; 96 Hr LC50 Pimephales promelas:1740 mg/L[flow-through]	48 Hr EC50 Daphnia magna: 1983 mg/L
Dipropylene Glycol Monomethyl Ether		96 Hr LC50 Pimephales promelas: >10000 mg/L [static]	48 Hr LC50 Daphnia magna: 1919 mg/L
Copper Phthalocyanine Compound		48 Hr LC50 Oryzias latipes: >100 mg/L [static]	
2-Butoxyethanol		96 Hr LC50 Lepomis macrochirus: 2950 mg/L	24 Hr EC50 water flea: 1720 mg/L; 24 Hr LC50 Daphnia magna: 1698-1940 mg/L
Formaldehyde		96 Hr LC50 Brachydanio rerio: 41 mg/L [static]	96 Hr EC50 water flea: 20 mg/L; 48 Hr EC50 Daphnia magna: 2 mg/L

Persistence and Degradability	No information available
Bioaccumulation	No information available
Mobility in Environmental Media	No information available

Component	log Pow
n-Butyl alcohol	0.785
Dipropylene Glycol Monomethyl Ether	-0.064
Copper Phthalocyanine Compound	6.6
2-Butoxyethanol	0.81
Formaldehyde	0.35

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

UN1210, Printing Ink, 3, III

14. TRANSPORT INFORMATION

ICAO/IATA

UN1210, Printing Ink, 3, III

IMDG/IMO

UN1210, Printing Ink, 3, III

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
Formaldehyde	50-00-0	< 0.5	0.1
n-Butyl alcohol	71-36-3	10 - 30	1.0
2-Butoxyethanol	111-76-2	5 - 10	1.0
Ethylene glycol monopropyl ether	2807-30-9	5 - 10	1.0

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

This product contains the following HAPs:

Component	CAS-No	Weight %
Ethylene glycol monopropyl ether	2807-30-9	5 - 10

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.

Component	CAS-No	Weight %
Formaldehyde	50-00-0	< 0.5
Benzene	71-43-2	< 0.01

State Right-to-Know

Component	Minnesota	Florida	New Jersey	Pennsylvania	Massachusetts	Rhode Island
n-Butyl alcohol	Not Listed	Not Listed	X	X	X	X
Dipropylene Glycol Monomethyl Ether	Not Listed	Not Listed	X	X	X	X
Ethylene glycol monopropyl ether	Not Listed	Not Listed	X	X	Not Listed	Not Listed
Copper Phthalocyanine Compound	Not Listed	Not Listed	X	X	Not Listed	Not Listed
2-Butoxyethanol	Not Listed	Not Listed	X	X	X	X
Phosphoric acid, dibutyl ester	Not Listed	Not Listed	X	X	X	X
Formaldehyde	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
n-Butyl alcohol	B2, D2B
Dipropylene Glycol Monomethyl Ether	B3

Component	WHMIS Classifications of Components
Ethylene glycol monopropyl ether	B3, D1B, D2B
Copper Phthalocyanine Compound	Uncontrolled product according to WHMIS classification criteria
2-Butoxyethanol	B3, D1A, D2B
Phosphoric acid, dibutyl ester	Uncontrolled product according to WHMIS classification criteria
Formaldehyde	A, B1, D1A, D2A, D2B; B3, D1A, D2A, D2B, E (regulated under Formol)

Component	NPRI - National Pollutant Release Inventory
n-Butyl alcohol	Part 4 Substance Part 1, Group 1 Substance
Dipropylene Glycol Monomethyl Ether	Part 4 Substance
Ethylene glycol monopropyl ether	Part 4 Substance
Copper Phthalocyanine Compound	Part 1, Group 1 Substance
2-Butoxyethanol	Part 4 Substance Part 1, Group 1 Substance; Part 5 Substance
Formaldehyde	Part 4 Substance Part 1, Group 1 Substance; Part 5 Substance

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

Does NOT contain a listed substance

HMIS:	Health	Flammability	Instability	PPE
	2*	2	0	X

16. OTHER INFORMATION

Revision Date Feb-16-2009

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