Material Safety Data Sheet

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

Print Date Mar-08-2013 **Revision Date** Mar-08-2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product code **5561**
Product name **Brilliant Pale Gold**
Product category 5500 Series Flat Poster 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
Barton Road
Heaton Mersey
Stockport, England 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 Colored liquid
Flammable Properties FLAMMABLE LIQUID AND VAPOR.
Emergency Overview Aspiration hazard. Harmful: may cause lung damage if swallowed. Irritant. May cause drowsiness and dizziness.

Eyes Moderately irritating to the eyes.
Skin Causes skin irritation.
Inhalation May cause irritation of respiratory tract. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Risk of serious damage to the lungs (by aspiration).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Petroleum naphtha, light aromatic	64742-95-6	10 - 30
Stoddard solvent	8052-41-3	10 - 30
Copper	7440-50-8	10 - 30
1,2,4-Trimethylbenzene (contaminant)	95-63-6	10 - 30
Ethylene glycol monopropyl ether	2807-30-9	5 - 10
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	1 - 5
1,3,5-Trimethylbenzene (contaminant)	108-67-8	1 - 5
Zinc	7440-66-6	1 - 5
Cumene (contaminant)	98-82-8	1 - 5
1,2,3-Trimethylbenzene (contaminant)	526-73-8	1 - 5

• Component names which have the word (contaminant) are constituents contained in Aromatic Hydrocarbon ingredients and are an integral part of the ingredient and cannot be separated. The percentage listed for the contaminant is as contained in the Hydrocarbon ingredient. (Example: 100% Hydrocarbon, 10% Contaminant A, 3% Contaminant B)

4. FIRST AID MEASURES

Eye Contact 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.

Product code 5561 - Brilliant Pale Gold **Revision Date** Mar-08-2013

Skin Contact	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.
Inhalation	If breathed in, move person into fresh air. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.
Ingestion	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	FLAMMABLE 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. Cool containers / tanks with water spray. Fire or intense heat may cause violent rupture of packages.
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating gases and vapours. Burning produces obnoxious and toxic fumes. Keep product and empty container away from heat and sources of ignition. Risk of ignition.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Remove all sources of ignition. 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	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. Do not take internally. Harmful or fatal if swallowed. Take notice of the directions of use on the label.
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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Ontario TWAEV	Mexico OEL (TWA)

Product code 5561 - Brilliant Pale Gold **Revision Date** Mar-08-2013

Stoddard solvent	TWA: 100 ppm	TWA: 100 ppm TWA: 525 mg/m³ TWA: 500 ppm TWA: 2900 mg/m³	20000 mg/m³	TWA: 525 mg/m³	TWA/LMPE-PPT: 100 ppm TWA/LMPE-PPT: 523 mg/m³ STEL/LMPE-CT: 200 ppm STEL/LMPE-CT: 1050 mg/m³
Copper	TWA: 0.2 mg/m³ (fume)	TWA: 0.1 mg/m³ (dust, fume, mist) TWA: 0.1 mg/m³ (fume) TWA: 1 mg/m³ (dust and mist)	100 mg/m³	TWA: 0.2 mg/m³ (fume) TWA: 1 mg/m³ (dust and mist)	TWA/LMPE-PPT: 0.2 mg/m³ (fume) TWA/LMPE-PPT: 1 mg/m³ (dust and mist) STEL/LMPE-CT: 2 mg/m³ (fume) STEL/LMPE-CT: 2 mg/m³ (dust and mist)
Ethylene glycol monopropyl ether				TWA: 25 ppm TWA: 110 mg/m³ Skin	
Solvent naphtha (petroleum), medium aliphatic				TWA: 525 mg/m³	
Cumene (contaminant)	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m³ Skin	900 ppm (10% LEL)	TWA: 50 ppm	TWA/LMPE-PPT: 50 ppm TWA/LMPE-PPT: 245 mg/m³ STEL/LMPE-CT: 75 ppm STEL/LMPE-CT: 365 mg/m³

Engineering Measures Use ventilation adequate to keep exposures below recommended exposure limits. 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. Wash hands before eating, drinking, or smoking. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colored liquid
Odor Characteristic
pH No information available
Boiling point/Boiling Range >149 °C / >300 °F
Freezing Point/Range No information available
Evaporation Rate No information available

Vapour Pressure No information available
Flammability (solid, gas) No information available

Flash Point 29 °C / 85 °F
Method Pensky Martens Closed Cup (PMCC)

Weight Per Gallon (lbs/gal) 9.29

Physical State Liquid
Odor Threshold No information available
Autoignition Temperature No information available
Melting Point/Range No information available
Solubility No information available
Partition Coefficient (n-octanol/water) No information available
Vapour Density Heavier than air

Flammability Limits in Air
Upper No information available
Lower No information available

Photochemically Reactive Yes

Specific Gravity 1.11

Product code 5561 - Brilliant Pale Gold **Revision Date** Mar-08-2013

VOC by weight % (less water) 62.37
VOC lbs/gal (less water) 5.8
VOC by volume % (less water) 79.95
VOC grams/liter (less water) 695.26

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
Petroleum naphtha, light aromatic	8400 mg/kg (Rat)	>2000 mg/kg (Rabbit)	3400 ppm (Rat) 4 h >5.2 mg/L (Rat) 4 h
1,2,4-Trimethylbenzene (contaminant)	3400 mg/kg (Rat)	>3160 mg/kg (Rabbit)	18 g/m³ (Rat) 4 h
Ethylene glycol monopropyl ether	3089 mg/kg (Rat)	960 µL/kg (Rabbit)	
Solvent naphtha (petroleum), medium aliphatic	>5000 mg/kg (Rat)	3000 mg/kg (Rabbit)	>5.28 mg/L (Rat) 4 h
1,3,5-Trimethylbenzene (contaminant)	5000 mg/kg (Rat)		24 g/m³ (Rat) 4 h
Cumene (contaminant)	1400 mg/kg (Rat)	>3160 mg/kg (Rabbit)	39000 mg/m³ (Rat) 4 h
1,2,3-Trimethylbenzene (contaminant)	8970 mg/kg (Rat)		

Chronic Toxicity

Component	ACGIH	IARC	NTP	OSHA
Cumene (contaminant)		Group 2B		X

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

Sensitisation No information available
Mutagenic Effects No information available
Reproductive Effects No information available
Developmental hazard No information available
Teratogenicity No information available
Chronic Effects 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, 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	Algae	Fish	Water Flea

Petroleum naphtha, light aromatic		96h LC50 Oncorhynchus mykiss: 9.22 mg/L	
Copper	96h EC50 Pseudokirchneriella subcapitata: 0.031 - 0.054 mg/L [static] 72h EC50 Pseudokirchneriella subcapitata: 0.0426 - 0.0535 mg/L [static]	96h LC50 Pimephales promelas: 0.0068 - 0.0156 mg/L 96h LC50 Pimephales promelas: <0.3 mg/L [static] 96h LC50 Oncorhynchus mykiss: 0.052 mg/L [flow-through] 96h LC50 Poecilia reticulata: 0.112 mg/L [flow-through] 96h LC50 Pimephales promelas: 0.2 mg/L [flow-through] 96h LC50 Cyprinus carpio: 0.3 mg/L [semi-static] 96h LC50 Cyprinus carpio: 0.8 mg/L [static] 96h LC50 Lepomis macrochirus: 1.25 mg/L [static]	48h EC50 Daphnia magna: 0.03 mg/L [static]
1,2,4-Trimethylbenzene (contaminant)		96h LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through]	48h EC50 Daphnia magna: 6.14 mg/L
Solvent naphtha (petroleum), medium aliphatic	96h EC50 Pseudokirchneriella subcapitata: 450 mg/L	96h LC50 Pimephales promelas: 800 mg/L [static]	48h EC50 Daphnia magna: >100 mg/L
1,3,5-Trimethylbenzene (contaminant)		96h LC50 Pimephales promelas: 3.48 mg/L	24h EC50 Daphnia magna: 50 mg/L
Zinc	72h EC50 Pseudokirchneriella subcapitata: 0.09 - 0.125 mg/L [static] 96h EC50 Pseudokirchneriella subcapitata: 0.11 - 0.271 mg/L [static]	96h LC50 Pimephales promelas: 0.211 - 0.269 mg/L [semi-static] 96h LC50 Pimephales promelas: 2.16 - 3.05 mg/L [flow-through] 96h LC50 Oncorhynchus mykiss: 0.24 mg/L [flow-through] 96h LC50 Oncorhynchus mykiss: 0.41 mg/L [static] 96h LC50 Cyprinus carpio: 0.45 mg/L [semi-static] 96h LC50 Oncorhynchus mykiss: 0.59 mg/L [semi-static] 96h LC50 Pimephales promelas: 2.66 mg/L [static] 96h LC50 Lepomis macrochirus: 3.5 mg/L [static] 96h LC50 Cyprinus carpio: 30 mg/L 96h LC50 Cyprinus carpio: 7.8 mg/L [static]	48h EC50 Daphnia magna: 0.139 - 0.908 mg/L [static]
Cumene (contaminant)	72h EC50 Pseudokirchneriella subcapitata: 2.6 mg/L	96h LC50 Pimephales promelas: 6.04 - 6.61 mg/L [flow-through] 96h LC50 Oncorhynchus mykiss: 2.7 mg/L [semi-static] 96h LC50 Oncorhynchus mykiss: 4.8 mg/L [flow-through] 96h LC50 Poecilia reticulata: 5.1 mg/L [semi-static]	48h EC50 Daphnia magna: 7.9 - 14.1 mg/L [static] 48h EC50 Daphnia magna: 0.6 mg/L

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

Component	log Pow
1,2,4-Trimethylbenzene (contaminant)	3.63
Cumene (contaminant)	3.55

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.

Product code 5561 - Brilliant Pale Gold **Revision Date** Mar-08-2013

14. TRANSPORT INFORMATION

DOT

UN1210, Printing Ink, 3, III

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

The following components are subject to reporting levels established by SARA Title III, Section 313

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Ethylene glycol monopropyl ether	2807-30-9	5 - 10	1.0
Copper	7440-50-8	10 - 30	1.0
Zinc	7440-66-6	1 - 5	1.0
1,2,4-Trimethylbenzene (contaminant)	95-63-6	10 - 30	1.0
Cumene (contaminant)	98-82-8	1 - 5	1.0

Zinc is reportable under SARA313 ONLY if it is a fume or dust form. Fume or dust refers to dry forms but does not refer to "wet" forms such as use in a solution or slurry.

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

Component	CAS-No	Weight %
Ethylene glycol monopropyl ether	2807-30-9	5 - 10
Cumene (contaminant)	98-82-8	1 - 5

U.S. State Regulations

Component	Massachusetts Right To Know	Minnesota Right To Know	New Jersey Right To Know	Pennsylvania Right To Know
Stoddard solvent	X	X	X	X
Copper	X	X	X	X
1,2,4-Trimethylbenzene (contaminant)	X	X	X	X
Ethylene glycol monopropyl ether	Not Listed	Not Listed	X	X
Solvent naphtha (petroleum), medium aliphatic	Not Listed	Not Listed	X	Not Listed
1,3,5-Trimethylbenzene (contaminant)	X	Not Listed	Not Listed	Not Listed
Zinc	X	Not Listed	X	X
Cumene (contaminant)	X	X	X	X

California Prop. 65

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

Component	CAS-No	Weight %
Cumene (contaminant)	98-82-8	1 - 5

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

Product code 5561 - Brilliant Pale Gold **Revision Date** Mar-08-2013

Petroleum naphtha, light aromatic	B3,D2B
Stoddard solvent	B3,D2B
Copper	Uncontrolled product according to WHMIS classification criteria
1,2,4-Trimethylbenzene (contaminant)	B3
Ethylene glycol monopropyl ether	B3,D1B,D2B
Solvent naphtha (petroleum), medium aliphatic	B3
1,3,5-Trimethylbenzene (contaminant)	B3
Cumene (contaminant)	B2,D2A
1,2,3-Trimethylbenzene (contaminant)	B3

Component	**NPRI - National Pollutant Release Inventory**
Petroleum naphtha, light aromatic	Part 5 Substance Part 5, Other Groups and Mixtures
Stoddard solvent	Part 5 Substance Part 5, Other Groups and Mixtures
Copper	Part 1, Group 1 Substance
1,2,4-Trimethylbenzene (contaminant)	Part 4 Substance Part 1, Group 1 Substance Part 5, Individual Substance
Ethylene glycol monopropyl ether	Part 4 Substance
Solvent naphtha (petroleum), medium aliphatic	Part 5 Substance Part 5, Other Groups and Mixtures
1,3,5-Trimethylbenzene (contaminant)	Part 4 Substance Part 5, Isomer Groups
Zinc	Part 1, Group 1 Substance
Cumene (contaminant)	Part 4 Substance Part 1, Group 1 Substance
1,2,3-Trimethylbenzene (contaminant)	Part 4 Substance Part 5, Isomer Groups

Regulation (EC) No. 1907/2006 (REACH), Article 57
This product does not contain substances of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 57)

HMIS:	**Health**	**Flammability**	**Reactivity**	**PPE**
	2 *	3	0	X

16. OTHER INFORMATION

Revision Date Mar-08-2013

Revision Note 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