

<b>43212-4912</b>
<b>-4917</b>



**Material Safety Data Sheet**  
Prepared in accordance with ISO 11014-1/ANSI standard Z400.1-2004

Print Date Apr-29-2009

Revision Date Apr-29-2009

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product code** 55LF33  
**Product name** Brilliant Light Orange  
**Product description** 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  
 7 Barton Road  
 Heaton Mersey Industrial Estate  
 Stockport, Cheshire 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](http://www.nazdar.com)  
 MSDS Information: 1-913-422-1888 ext 2305  
 MSDS Contact: Regulatory Compliance  
 email: [regcomp@nazdar.com](mailto:regcomp@nazdar.com)

### 2. HAZARDS IDENTIFICATION

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

**Appearance** Viscous liquid  
**Flammable Properties** FLAMMABLE LIQUID AND VAPOR.  
**Emergency Overview** Aspiration hazard. Harmful: may cause lung damage if swallowed. May cause drowsiness and dizziness.

**Eyes** May cause eye irritation.  
**Skin** May cause skin irritation and/or dermatitis.  
**Inhalation** 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 %
Stoddard solvent	8052-41-3	10 - 30
Petroleum naphtha, light aromatic	64742-95-6	10 - 30
Talc	14807-96-6	10 - 30
Kaolin	1332-58-7	10 - 30
1,2,4-Trimethylbenzene (contaminant)	95-63-6	5 - 10
Ethylene glycol monopropyl ether	2807-30-9	5 - 10
Benzidine Based Dye	Trade Secret	1 - 5
Titanium dioxide	13463-67-7	1 - 5
1,3,5-Trimethylbenzene (contaminant)	108-67-8	1 - 5
Cumene (contaminant)	98-82-8	1 - 5
Crystalline silica (cristobalite)	14464-46-1	< 0.5

- 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

**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.

Product code 55LF33 - Brilliant Light Orange

Revision Date Apr-29-2009

<b>Eye Contact</b>	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.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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

<b>Flammable Properties</b>	FLAMMABLE LIQUID AND VAPOR.
<b>Suitable Extinguishing Media</b>	Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Protective Equipment and Precautions for Firefighters</b>	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.
<b>Specific Hazards Arising from the Chemical</b>	Keep product and empty container away from heat and sources of ignition. Risk of ignition. Thermal decomposition can lead to release of irritating gases and vapours. Burning produces obnoxious and toxic fumes.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	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.
<b>Methods for Cleaning Up</b>	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.
<b>Environmental Precautions</b>	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

<b>Handling</b>	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.
<b>Storage</b>	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

Product code 55LF33 - Brilliant Light Orange

Revision Date Apr-29-2009

Component	Weight %	ACGIH TLV	OSHA PEL	Ontario TWA/EV
Stoddard solvent	10 - 30	TWA: 100 ppm	TWA: 100 ppm TWA: 525 mg/m <sup>3</sup> TWA: 2900 mg/m <sup>3</sup> TWA: 500 ppm	TWA: 525 mg/m <sup>3</sup>
Talc	10 - 30	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
Kaolin	10 - 30	TWA: 2 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
1,2,4-Trimethylbenzene (contaminant)	5 - 10	TWA: 25 ppm		TWA: 25 ppm TWA: 123 mg/m <sup>3</sup>
Ethylene glycol monopropyl ether	5 - 10			TWA: 25 ppm TWA: 110 mg/m <sup>3</sup> Skin
Titanium dioxide	1 - 5	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 15 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
1,3,5-Trimethylbenzene (contaminant)	1 - 5	TWA: 25 ppm		TWA: 123 mg/m <sup>3</sup> TWA: 25 ppm
Cumene (contaminant)	1 - 5	TWA: 50 ppm	TWA: 245 mg/m <sup>3</sup> TWA: 50 ppm Skin	TWA: 50 ppm TWA: 245 mg/m <sup>3</sup> Skin
Crystalline silica (cristobalite)	< 0.5	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>

Component	Weight %	NIOSH IDLH	Mexico OEL (TWA)
Stoddard solvent	10 - 30	20000 mg/m <sup>3</sup>	TWA: 523 mg/m <sup>3</sup> TWA: 100 ppm STEL: 200 ppm STEL: 1050 mg/m <sup>3</sup>
Talc	10 - 30	1000 mg/m <sup>3</sup> containing no asbestos and <1% quartz	TWA: 2 mg/m <sup>3</sup>
Kaolin	10 - 30		TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>
1,2,4-Trimethylbenzene (contaminant)	5 - 10		TWA: 125 mg/m <sup>3</sup> TWA: 25 ppm STEL: 35 ppm STEL: 170 mg/m <sup>3</sup>
Titanium dioxide	1 - 5	5000 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>
1,3,5-Trimethylbenzene (contaminant)	1 - 5		TWA: 125 mg/m <sup>3</sup> TWA: 25 ppm STEL: 35 ppm STEL: 170 mg/m <sup>3</sup>
Cumene (contaminant)	1 - 5	900 ppm 10% LEL	TWA: 245 mg/m <sup>3</sup> TWA: 50 ppm STEL: 365 mg/m <sup>3</sup> STEL: 75 ppm
Crystalline silica (cristobalite)	< 0.5	25 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>

**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

Product code 55LF33 - Brilliant Light Orange

Revision Date Apr-29-2009

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance</b>	Viscous liquid	<b>Physical State</b>	Liquid
<b>Odor</b>	Characteristic	<b>Odor Threshold</b>	No information available
<b>pH</b>	No information available	<b>Autoignition Temperature</b>	No information available
<b>Boiling point/Boiling Range</b>	>149°C / >300°F	<b>Melting Point/Range</b>	No information available
<b>Freezing Point/Range</b>	No information available	<b>Solubility</b>	No information available
<b>Evaporation Rate</b>	No information available	<b>Partition Coefficient (n-octanol/water)</b>	No information available
<b>Vapour Pressure</b>	No information available	<b>Vapour Density</b>	Heavier than air
<b>Flammability (solid, gas)</b>	No information available	<b>Flash Point</b>	29°C / 85°F
<b>Flammability Limits in Air</b>		<b>Method</b>	Pensky Martens Closed Cup (PMCC)
<b>Upper</b>	No information available	<b>Photochemically Reactive</b>	Yes
<b>Lower</b>	No information available		
<b>Weight Per Gallon (lbs/gal)</b>	9.46	<b>Specific Gravity</b>	1.135
<b>VOC by weight</b>	49.611	<b>VOC by volume</b>	65.478
<b>VOC lbs/gal</b>	4.698	<b>VOC grams/liter</b>	562.942

**10. STABILITY AND REACTIVITY**

<b>Chemical Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	Heat, flames and sparks.
<b>Incompatible Products</b>	Strong acids. Strong bases. Strong oxidizing agents. Reducing agents.
<b>Hazardous Decomposition Products</b>	Thermal decomposition can lead to release of irritating gases and vapours. Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide.
<b>Possibility of Hazardous Reactions</b>	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 )	5.2 mg/L ( Rat ) 4 h 3400 ppm ( Rat ) 4 h
1,2,4-Trimethylbenzene (contaminant)	3400 mg/kg ( Rat ) 8970 mg/kg ( Rat )	3160 mg/kg ( Rabbit )	18 g/m <sup>3</sup> ( Rat ) 4 h
Ethylene glycol monopropyl ether	3089 mg/kg ( Rat )	960 µL/kg ( Rabbit )	
Titanium dioxide	10000 mg/kg ( Rat )		
1,3,5-Trimethylbenzene (contaminant)	8970 mg/kg ( Rat ) 5000 mg/kg ( Rat )		24 g/m <sup>3</sup> ( Rat ) 4 h
Cumene (contaminant)	1400 mg/kg ( Rat )	3160 mg/kg ( Rabbit )	39000 mg/m <sup>3</sup> ( Rat ) 4 h

**Chronic Toxicity**

Component	ACGIH	IARC	NTP	OSHA
Benzidine Based Dye		Group 1		
Titanium dioxide		Group 2B		X
Crystalline silica (cristobalite)	A2	Group 1		X

**Legend:**

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans  
Group 2B - Possibly Carcinogenic to Humans

Product code 55LF33 - Brilliant Light Orange

Revision Date Apr-29-2009

OSHA: (Occupational Safety &amp; Health Administration)

X - Present

<b>Sensitisation</b>	No information available
<b>Mutagenic Effects</b>	No information available
<b>Reproductive Effects</b>	No information available
<b>Developmental Effects</b>	No information available
<b>Teratogenicity</b>	No information available
<b>Chronic Effects</b>	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.
<b>Target Organ Effects</b>	Bladder, Blood, Central nervous system, Central Vascular System, Eyes, Kidney, Liver, Lungs, 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
Petroleum naphtha, light aromatic Talc		96 Hr LC50 Oncorhynchus mykiss: 9.22 mg/L	48 Hr EC50 Daphnia magna: 6.14 mg/L
1,2,4-Trimethylbenzene (contaminant)		96 Hr LC50 Brachydanio rerio: >100 µg/L [semi-static]	48 Hr EC50 Daphnia magna: 6.14 mg/L
1,3,5-Trimethylbenzene (contaminant)		96 Hr LC50 Pimephales promelas: 7.72 mg/L [flow-through]	24 Hr EC50 water flea: 50 mg/L
Cumene (contaminant)	72 Hr EC50 Selenastrum capricornutum: 2.6 mg/L	96 Hr LC50 Oncorhynchus mykiss: 4.8 mg/L [flow-through]	48 Hr EC50 water flea: 0.6 mg/L

<b>Persistence and Degradability</b>	No information available
<b>Bioaccumulation</b>	No information available
<b>Mobility in Environmental Media</b>	No information available

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Methods</b>	Dispose of contents/container in accordance with local regulation.
<b>Contaminated Packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. TRANSPORT INFORMATION

### DOT

UN1210, Printing Ink, 3, III

### ICAO/IATA

UN1210, Printing Ink, 3, III

### IMDG/IMO

UN1210, Printing Ink, 3, III

Product code 55LF33 - Brilliant Light Orange

Revision Date Apr-29-2009

## 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
Ethylene glycol monopropyl ether	2807-30-9	5 - 10	1.0
1,2,4-Trimethylbenzene (contaminant)	95-63-6	5 - 10	1.0
Cumene (contaminant)	98-82-8	1 - 5	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
Cumene (contaminant)	98-82-8	1 - 5

**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 %
Toluene	108-88-3	< 0.01
Benzene	71-43-2	< 0.001
Lead	7439-92-1	< 0.0001
Mercury	7439-97-6	< 0.0001
Arsenic	7440-38-2	< 0.0001
Cadmium and compounds (as Cd)	7440-43-9	< 0.0001
Quartz, crystalline silica	14808-60-7	< 0.01
Benzidine Based Dye	Mixture	1 - 5
Ethyl benzene (contaminant)	100-41-4	< 0.1

**State Right-to-Know**

Component	Minnesota	Florida	New Jersey	Pennsylvania	Massachusetts	Rhode Island
Stoddard solvent	Not Listed	Not Listed	X	X	X	X
Petroleum naphtha, light aromatic	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Talc	Not Listed	Not Listed	X	X	X	X
Kaolin	Not Listed	Not Listed	X	X	X	X
1,2,4-Trimethylbenzene (contaminant)	Not Listed	Not Listed	X	X	X	X
Ethylene glycol monopropyl ether	Not Listed	Not Listed	X	X	Not Listed	Not Listed
Benzidine Based Dye	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Titanium dioxide	Not Listed	Not Listed	X	X	X	X
1,3,5-Trimethylbenzene (contaminant)	Not Listed	Not Listed	X	X	X	X
Cumene (contaminant)	Not Listed	Not Listed	X	X	X	X
Crystalline silica (cristobalite)	Not Listed	Not Listed	X	X	X	Not Listed

**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

