



**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** 5512  
**Product name** Opaque White  
**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](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**  
**Flammable Properties**  
**Emergency Overview**

Colored liquid  
 FLAMMABLE LIQUID AND VAPOR.  
 Aspiration hazard. Harmful: may cause lung damage if swallowed. Irritant. May cause drowsiness and dizziness.

**Eyes**  
**Skin**  
**Inhalation**

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

**Ingestion**

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Titanium dioxide	13463-67-7	10 - 30
Kaolin	1332-58-7	10 - 30
Stoddard solvent	8052-41-3	10 - 30
Petroleum naphtha, light aromatic	64742-95-6	10 - 30
Ethylene glycol monopropyl ether	2807-30-9	5 - 10
1,2,4-Trimethylbenzene (contaminant)	95-63-6	5 - 10
Solvent naphtha (petroleum), medium aliphatic	64742-88-7	5 - 10
Silicon Dioxide	7631-86-9	1 - 5
1,3,5-Trimethylbenzene (contaminant)	108-67-8	1 - 5
Cumene (contaminant)	98-82-8	< 1

• 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.

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<b>Skin Contact</b>	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.
<b>Inhalation</b>	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. Cool containers / tanks with water spray. Fire or intense heat may cause violent rupture of packages.
<b>Specific Hazards Arising from the Chemical</b>	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

<b>Personal Precautions</b>	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.
<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>	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.
<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.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Exposure limits

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Ontario TWAEV	Mexico OEL (TWA)
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Titanium dioxide	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> (total dust) TWA: 15 mg/m <sup>3</sup> (total dust)	5000 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> (total dust)	TWA/LMPE-PPT: 10 mg/m <sup>3</sup> (as Ti) STEL/LMPE-CT: 20 mg/m <sup>3</sup> (as Ti)
Kaolin	TWA: 2 mg/m <sup>3</sup> (respirable fraction)	TWA: 10 mg/m <sup>3</sup> (total dust) TWA: 5 mg/m <sup>3</sup> (respirable fraction) TWA: 15 mg/m <sup>3</sup> (total dust)		TWA: 2 mg/m <sup>3</sup> (respirable)	TWA/LMPE-PPT: 10 mg/m <sup>3</sup> STEL/LMPE-CT: 20 mg/m <sup>3</sup>
Stoddard solvent	TWA: 100 ppm	TWA: 100 ppm TWA: 525 mg/m <sup>3</sup> TWA: 500 ppm TWA: 2900 mg/m <sup>3</sup>	20000 mg/m <sup>3</sup>	TWA: 525 mg/m <sup>3</sup>	TWA/LMPE-PPT: 100 ppm TWA/LMPE-PPT: 523 mg/m <sup>3</sup> STEL/LMPE-CT: 200 ppm STEL/LMPE-CT: 1050 mg/m <sup>3</sup>
Ethylene glycol monopropyl ether				TWA: 25 ppm TWA: 110 mg/m <sup>3</sup> Skin	
Solvent naphtha (petroleum), medium aliphatic				TWA: 525 mg/m <sup>3</sup>	
Silicon Dioxide		TWA: 6 mg/m <sup>3</sup>	3000 mg/m <sup>3</sup>		
Cumene (contaminant)	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m <sup>3</sup> Skin	900 ppm (10% LEL)	TWA: 50 ppm	TWA/LMPE-PPT: 50 ppm TWA/LMPE-PPT: 245 mg/m <sup>3</sup> STEL/LMPE-CT: 75 ppm STEL/LMPE-CT: 365 mg/m <sup>3</sup>

**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**

&gt;149 °C / &gt;300 °F

**Freezing Point/Range**

No information available

**Evaporation Rate**

No information available

**Vapour Pressure**

No information available

**Flammability (solid, gas)**

No information available

**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**

No information available

**(n-octanol/water)****Vapour Density**

Heavier than air

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

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

**Photochemically Reactive** Yes

**Weight Per Gallon (lbs/gal)** 11.16  
**VOC by weight % (less water)** 41.46  
**VOC lbs/gal (less water)** 4.63

**Specific Gravity** 1.34  
**VOC by volume % (less water)** 64.6  
**VOC grams/liter (less water)** 554.96

## 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 (CO<sub>2</sub>). Carbon monoxide.

**Possibility of Hazardous Reactions** None under normal processing.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Titanium dioxide	>10000 mg/kg ( Rat )		
Petroleum naphtha, light aromatic	8400 mg/kg ( Rat )	>2000 mg/kg ( Rabbit )	3400 ppm ( Rat ) 4 h >5.2 mg/L ( Rat ) 4 h
Ethylene glycol monopropyl ether	3089 mg/kg ( Rat )	960 µL/kg ( Rabbit )	
1,2,4-Trimethylbenzene (contaminant)	3400 mg/kg ( Rat )	>3160 mg/kg ( Rabbit )	18 g/m <sup>3</sup> ( Rat ) 4 h
Solvent naphtha (petroleum), medium aliphatic	>5000 mg/kg ( Rat )	3000 mg/kg ( Rabbit )	>5.28 mg/L ( Rat ) 4 h
Silicon Dioxide	>5000 mg/kg ( Rat )	>2000 mg/kg ( Rabbit )	>2.2 mg/L ( Rat ) 1 h
1,3,5-Trimethylbenzene (contaminant)	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
Titanium dioxide		Group 2B		X
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. Blood, Central nervous system, Eyes, Kidney, Respiratory system, Skin.

**Target Organ Effects**

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## 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	
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
Silicon Dioxide	72h EC50 Pseudokirchneriella subcapitata: 440 mg/L	96h LC50 Brachydanio rerio: 5000 mg/L [static]	48h EC50 Ceriodaphnia dubia: 7600 mg/L
1,3,5-Trimethylbenzene (contaminant)		96h LC50 Pimephales promelas: 3.48 mg/L	24h EC50 Daphnia magna: 50 mg/L
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.

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

**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

**U.S. State Regulations**

Component	Massachusetts Right To Know	Minnesota Right To Know	New Jersey Right To Know	Pennsylvania Right To Know
Titanium dioxide	X	X	X	X
Kaolin	X	X	X	X
Stoddard solvent	X	X	X	X
Ethylene glycol monopropyl ether	Not Listed	Not Listed	X	X
1,2,4-Trimethylbenzene (contaminant)	X	X	X	X
Solvent naphtha (petroleum), medium aliphatic	Not Listed	Not Listed	X	Not Listed
Silicon Dioxide	X	X	X	X
1,3,5-Trimethylbenzene (contaminant)	X	Not Listed	Not Listed	Not Listed
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 %
Titanium dioxide	13463-67-7	10 - 30
Cumene (contaminant)	98-82-8	< 1

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

Component	NPRI - National Pollutant Release Inventory
Stoddard solvent	Part 5 Substance Part 5, Other Groups and Mixtures
Petroleum naphtha, light aromatic	Part 5 Substance Part 5, Other Groups and Mixtures
Ethylene glycol monopropyl ether	Part 4 Substance
1,2,4-Trimethylbenzene (contaminant)	Part 4 Substance Part 1, Group 1 Substance Part 5, Individual 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
Cumene (contaminant)	Part 4 Substance Part 1, Group 1 Substance

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**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)

<b>HMIS:</b>	<b>Health</b>	<b>Flammability</b>	<b>Reactivity</b>	<b>PPE</b>
	2 *	3	0	X

**16. OTHER INFORMATION**

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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**