



1. PRODUCT AND COMPANY IDENTIFICATION

Product code WIN140
Product name Super Opaque White
Product description Ink Product

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
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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 Irritant. May cause drowsiness and dizziness.

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

Skin Causes skin irritation. Prolonged skin contact may defat the skin and produce dermatitis. May be harmful if absorbed through skin.

Inhalation Inhalation of vapours is irritating to the respiratory system, may cause throat pain and cough. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Risk of serious damage to the lungs (by inhalation).

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Titanium dioxide	13463-67-7	30 - 60
Diethylene Glycol Ethyl Ether Acetate	112-15-2	10 - 30
Diacetone alcohol	123-42-2	10 - 30
Cyclohexanone	108-94-1	1 - 5
Polyethylene glycol octylphenyl ether	9036-19-5	1 - 5
Silicon Dioxide	7631-86-9	1 - 5

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.

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 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 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 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 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	ACGIH TLV	OSHA PEL	NIOSH IDLH	Ontario TWAEV	Mexico OEL (TWA)
Titanium dioxide	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 15 mg/m ³	5000 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³ STEL: 20 mg/m ³
Diacetone alcohol	TWA: 50 ppm	TWA: 50 ppm TWA: 240 mg/m ³	1800 ppm 10% LEL	TWA: 240 mg/m ³ TWA: 50 ppm STEL: 360 mg/m ³ STEL: 75 ppm	TWA: 240 mg/m ³ TWA: 50 ppm STEL: 75 ppm STEL: 360 mg/m ³
Cyclohexanone	TWA: 20 ppm Skin STEL: 50 ppm	TWA: 25 ppm TWA: 100 mg/m ³ Skin TWA: 50 ppm TWA: 200 mg/m ³	700 ppm	TWA: 20 ppm STEL: 50 ppm Skin	TWA: 50 ppm TWA: 200 mg/m ³ STEL: 400 mg/m ³ STEL: 100 ppm
Silicon Dioxide			3000 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

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

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	Flash Point	46°C / 114°F
Flammability Limits in Air		Method	Setaflash closed cup
Upper	No information available	Photochemically Reactive	No
Lower	No information available		
Weight Per Gallon (lbs/gal)	12.168	Specific Gravity	1.46
VOC by weight	38.312	VOC by volume	54.11
VOC lbs/gal (less water)	4.667	VOC grams/liter (less water)	559.175

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 ₂). 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)		
Diethylene Glycol Ethyl Ether Acetate	11 g/kg (Rat)	15100 µL/kg (Rabbit)	
Diacetone alcohol	4 g/kg (Rat)	13500 mg/kg (Rabbit)	

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Cyclohexanone	800 mg/kg (Rat)	948 mg/kg (Rabbit)	10.7 mg/L (Rat) 4 h 8000 ppm (Rat) 4 h
Polyethylene glycol octylphenyl ether	4190 mg/kg (Rat)		
Silicon Dioxide	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.2 mg/L (Rat) 1 h

Chronic Toxicity

Component	ACGIH	IARC	NTP	OSHA
Titanium dioxide		Group 2B		X
Cyclohexanone	A3			

ACGIH: (American Conference of Governmental Industrial Hygienists)
 IARC: (International Agency for Research on Cancer)
 OSHA: (Occupational Safety & Health Administration)

A3 - Animal Carcinogen
 Group 2B - Possibly Carcinogenic to Humans
 X - Present

Sensitisation	No information available
Mutagenic Effects	No information available
Reproductive Effects	No information available
Developmental Effects	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	Central nervous system, Eyes, Lungs, Liver, Kidney, 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
Diacetone alcohol		96 Hr LC50 Lepomis macrochirus: 420 mg/L	48 Hr EC50 water flea: 8750 mg/L
Cyclohexanone	96 Hr EC50 Chlorella vulgaris: 20 mg/L	96 Hr LC50 Pimephales promelas: 8.9 mg/L	48 Hr EC50 water flea: 820 mg/L; 48 Hr EC50 Daphnia magna: 800 mg/L
Silicon Dioxide	72 Hr EC50 Selenastrum capricornutum: 440 mg/L	96 Hr LC50 Brachydanio rerio: 5000 mg/L [static]	48 Hr EC50 Ceriodaphnia dubia: 7600 mg/L

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

Component	log Pow
Diacetone alcohol	1.03
Cyclohexanone	0.86

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

14. TRANSPORT INFORMATION

UN1210, Printing Ink, 3, III

In the U.S. and Canada, this material may be reclassified as a combustible liquid and is not regulated, via surface transportation, in containers less than 119 gallons or 450 liters [per 49 CFR 173.150 (f)] [per Transportation of Dangerous Goods Regulations/Clear Language Part 1.33].

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
Diethylene Glycol Ethyl Ether Acetate	112-15-2	10 - 30	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 %
Diethylene Glycol Ethyl Ether Acetate	112-15-2	10 - 30

U.S. State Regulations

State Right-to-Know

Component	Minnesota	Florida	New Jersey	Pennsylvania	Massachusetts	Rhode Island
Titanium dioxide	Not Listed	Not Listed	X	X	X	X
Diethylene Glycol Ethyl Ether Acetate	Not Listed	Not Listed	X	X	Not Listed	Not Listed
Diacetone alcohol	Not Listed	Not Listed	X	X	X	X
Cyclohexanone	Not Listed	Not Listed	X	X	X	X
Polyethylene glycol octylphenyl ether	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed	Not Listed
Silicon Dioxide	Not Listed	Not Listed	Not Listed	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

Component	WHMIS Classifications of Components
Titanium dioxide	D2A
Diethylene Glycol Ethyl Ether Acetate	Uncontrolled product according to WHMIS classification criteria
Diacetone alcohol	B3, D2B
Cyclohexanone	B3, D1B, D2B
Polyethylene glycol octylphenyl ether	D2B
Silicon Dioxide	Uncontrolled product according to WHMIS classification criteria

Component	NPRI - National Pollutant Release Inventory
Diethylene Glycol Ethyl Ether Acetate	Part 4 Substance Part 5 Substance

