

SAFETY DATA SHEET

Published Date Jan-03-2024 Revision Date Jan-03-2024 Revision Number 2.6

1. IDENTIFICATION

<u>Product identifier</u> Product code Product name Product category	9722 Ultra Blue 9700 Series SV Screen Ink
Other means of identification Synonyms	None
Recommended use of the chemica Recommended use	al and restrictions on use Industrial Printing Operations
Details of the supplier of the safet UNITED STATES	<u>y data sheet</u> UNITED KINGDOM
Nazdar Company	Nazdar Limited
8501 Hedge Lane Terrace Shawnee, KS 66227	Barton Road Heaton Mersey
Tel: +001-913-422-1888 Tel: +001-800-677-4657 Fax: +001-913-422-2294	Stockport, England SK4 3EG Tel: +44 161 442 2111

Emergency telephone number

USA: Chemtrec: +001-800-424-9300 Outside USA: Chemtrec: +001-703-527-3887 24 Hour Emergency Phone Number

2. HAZARDS IDENTIFICATION

Classification

www.nazdar.com

Acute toxicity - Inhalation (Vapors)	Category 3 - (H331)
Acute toxicity - Inhalation (Dusts/Mists)	Category 3 - (H331)
Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)

Label elements



Signal word Danger

Hazard statements

H315 - Causes skin irritation H317 - May cause an allergic skin reaction H319 - Causes serious eye irritation H331 - Toxic if inhaled

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P280 - Wear protective gloves and eye/face protection

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P311 - Call a POISON CENTER or doctor

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Hazards not otherwise classified (HNOC)

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%	Trade secret	Note
2-Butoxyethanol	111-76-2	30 - 60	*	
Resin	Not Available	1 - 5	*	
Titanium Dioxide	13463-67-7	1 - 5	*	

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

Description of first aid measures

General Advice Eye Contact	Show this safety data sheet to the doctor in attendance. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention if irritation develops and persists.
Skin Contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. If irritation (redness, rash, blistering) develops, get medical attention.
Inhalation	Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Get medical attention immediately.
Ingestion	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Most important symptoms and effects, both acute and delayed

None under normal use conditions.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam. Carbon dioxide (CO2). Dry chemical. Water spray. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media

No information available.

Specific Hazards Arising from the Chemical

Thermal decomposition can lead to release of irritating gases and vapors. May emit toxic fumes under fire conditions.

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. Cool containers / tanks with water spray. Sealed containers may rupture when heated.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Remove all sources of ignition. Ventilate the area. Avoid contact with eyes, skin and clothing. Avoid breathing dust or vapor. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions

Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Keep out of drains, sewers, ditches and waterways. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Use clean non-sparking tools to collect absorbed material.

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Ensure adequate ventilation.

Conditions for safe storage, including any incompatibilities

Storage

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep container closed when not in use. Keep out of the reach of children.

Incompatible Products Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Chemical name	ACGIH TLV
2-Butoxyethanol 111-76-2	TWA: 20 ppm
Titanium Dioxide	TWA: 0.2 mg/m ³ nanoscale respirable particulate matter
13463-67-7	TWA: 2.5 mg/m ³ finescale respirable particulate matter
Chemical name	OSHA PEL
2-Butoxyethanol	TWA: 50 ppm
111-76-2	TWA: 240 mg/m ³
	Skin
Titanium Dioxide	TWA: 15 mg/m ³ total dust
13463-67-7	
Chemical name	OSHA PEL (vacated)
2-Butoxyethanol	TWA: 25 ppm
111-76-2	TWA: 120 mg/m ³
	Skin
Titanium Dioxide	TWA: 10 mg/m ³ total dust
13463-67-7	

	TWA: 20 ppm TWA: 10 mg/m ³ Mexico OEL (TWA) TWA/VLE-PPT: 20 ppm TWA/VLE-PPT: 10 mg/m ³
	Mexico OEL (TWA) TWA/VLE-PPT: 20 ppm
	TWA/VLE-PPT: 20 ppm
	TWA/VLE-PPT: 10 mg/m ³
etc. Controlled ventilation mea advised to consider national C	eneral ventilation. Natural ventilation is from doors, windows ans air is supplied or removed by a powered fan. Users are occupational Exposure Limits or other equivalent values. In wear suitable respiratory equipment.
ch as personal protective equ	ipment
	shields (or goggles). If splashes are likely to occur:. Wear at eyewash stations and safety showers are close to the
	othing, including boots, gloves, lab coat, apron or coveralls, a ontact.
Suitable materials also with pr corresponding >480 minutes of rubber (0.5 mm), polyvinylchlo Supplementary note: The spec of glove manufacturers. Takin chemical-protective glove in p determined through testing. Due to different glove types, th	olonged, direct contact (Recommended: Protective index 6, of permeation time): eg. nitrile rubber (0.4 mm), chloroprene
respiratory protection should b accordance with current local	d or irritation is experienced, NIOSH/MSHA approved be worn. Respiratory protection must be provided in regulations. Selection of air-purifying or positive-pressure be specific operation and the potential airborne concentration of
	etc. Controlled ventilation mea advised to consider national C case of insufficient ventilation, ch as personal protective equ Wear safety glasses with side suitable face shield. Ensure th workstation location. Wear impervious protective cla appropriate, to prevent skin co Chemical resistant protective of Suitable materials also with pr corresponding >480 minutes of rubber (0.5 mm), polyvinylchlo Supplementary note: The spec of glove manufacturers. Takin chemical-protective glove in p determined through testing. Due to different glove types, th Replace gloves immediately w dimension, color, flexibility. If exposure limits are exceede respiratory protection should b accordance with current local supplied-air will depend on the

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash hands before eating, drinking or smoking. Wash contaminated clothing before reuse. Avoid contact with eyes, skin and clothing. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and Physical state Odor	<u>chemical properties</u> Liquid Characteristic	Appearance Odor Threshold	Colored No information available
<u>Property</u> pH	<u>Values</u>	Remarks • Method No data available	
Melting Point / Freezing Point Boiling Point / Boiling Range	No information available > 149 °C / 300 °F	No data available	

584.45

VOC by weight % (less water)	VOC by volume % (less water)	VOC lbs/gal (less water)	VOC grams/liter (less water)
Photochemically Reactive Weight Per Gallon (lbs/gal)	No 8.49		
Other information			
Explosive Properties Oxidizing Properties	No data available No data available		
Water Solubility Solubility in other solvents Partition coefficient: n-octanol/wate Autoignition Temperature Hyphen Kinematic viscosity Dynamic viscosity	er No information available	No data available No data available No data available No data available No data available No data available No data available	
Flash Point Evaporation rate Flammability Limit in Air Upper flammability limit Lower flammability limit Vapor Pressure Vapor Density Specific Gravity	62 °C / 143 °F 1.02	Pensky Martens Clo No data available No data available No data available No data available No data available	osed Cup (PMCC)

10. STABILITY AND REACTIVITY

4.88

60.26

Reactivity

No information available.

<u>Chemical stability</u> Stable under normal conditions.

57.36

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible materials

Strong acids. Strong bases. Strong oxidizing agents. Reducing agent.

Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors. Carbon dioxide (CO2). Carbon monoxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available. Toxic if inhaled. (based on components).
Eye Contact	Specific test data for the substance or mixture is not available.
Skin Contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Chemical name	Oral LD50
2-Butoxyethanol	= 470 mg/kg (Rat)

111-76-2		
Titanium Dioxide	> 10000 mg/kg (Rat)	
13463-67-7		
Chemical name	Dermal LD50	
2-Butoxyethanol	Dermal LD50 = 435 mg/kg (Rabbit)	

Chemical name	Inhalation LC50
2-Butoxyethanol	= 450 ppm (Rat)4 h
111-76-2	= 486 ppm (Rat) 4 h
Titanium Dioxide	= 5.09 mg/L (Rat)4 h
13463-67-7	

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Specific test data for the substance or mixture is not available.		
Delayed and immediate effects	as well as chronic effects from sho	rt and long-term exposure	
Skin corrosion/irritation		Specific test data for the substance or mixture is not available. Causes skin irritation (pain, redness and swelling). (based on components).	
Eye damage/irritation		Specific test data for the substance or mixture is not available. Causes serious eye irritation.	
Irritation	Specific test data for the substant	nce or mixture is not available.	
Corrosivity	Specific test data for the substant		
Sensitization	Specific test data for the substance or mixture is not available. May cause an allergic skin reaction. (based on components).		
Mutagenic Effects	Specific test data for the substance or mixture is not available.		
Carcinogenic effects	Specific test data for the substance or mixture is not available.		
Reproductive Effects	Specific test data for the substance or mixture is not available.		
STOT - single exposure	Specific test data for the substance or mixture is not available.		
STOT - repeated exposure	Specific test data for the substance or mixture is not available.		
Chronic Toxicity	Specific test data for the substance or mixture is not available		
Aspiration hazard	Specific test data for the substance or mixture is not available.		
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.		
Chemical name		ACGIH	
2-Butoxyethanol		A3	
111-76-2			
Titanium Dioxide		A3	
13463-67-7			
Chemical name		IARC	
Titanium Dioxide		Group 2B	
13463-67-7			

Chemical name	OSHA

	OSHA
Titanium Dioxide	Х
13463-67-7	

Numerical measures of toxicity - Product Information

Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	820.70 mg/kg
ATEmix (dermal)	99,999.00 mg/kg
ATEmix (inhalation-gas)	99,999.00

ATEmix (inhalation-dust/mist)	0.875 mg/l
ATEmix (inhalation-vapor)	5.24 mg/l

12. ECOLOGICAL INFORMATION

<u>Ecotoxicity</u> Specific test data for the substance or mixture is not available.

0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical name	Fish
2-Butoxyethanol	96h LC50 Lepomis macrochirus: = 1490 mg/L (static)
111-76-2	96h LC50 Lepomis macrochirus: = 2950 mg/L
Resin	96h LC50 Oncorhynchus mykiss: = 11.5 mg/L (static)

Chemical name	Crustacea
2-Butoxyethanol 111-76-2	48h EC50 Daphnia magna: > 1000 mg/L

Persistence and Degradability

No information available.

Bioaccumulation

Chemical name	Partition coefficient
2-Butoxyethanol	0.81
111-76-2	

13. DISPOSAL CONSIDERATIONS		
Waste treatment methods		
Waste Disposal Methods	Contain and dispose of waste according to local regulations.	
Contaminated Packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal.	
14. TRANSPORT INFORMATION		
Note:	This information is not intended to convey all specific transportation requirements relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation information can be found in the specific regulations for your mode of transportation. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.	
DOT UN/ID no Proper Shipping Name Transport hazard class(es) Packing Group	UN2810 Toxic Liquid, Organic, N.O.S. (2-Butoxyethanol) 6.1 III	
ICAO / IATA / IMDG / IMO UN/ID no Proper Shipping Name	UN2810 Toxic Liquid, Organic, N.O.S. (2-Butoxyethanol)	

Transport hazard class(es)	6.1
Packing Group	

15. REGULATORY INFORMATION

International Inventories

All substances are listed as ACTIVE on the TSCA Inventory. For further information, please contact:. Supplier (manufacturer/importer/downstream user/distributor).

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. Chemical name CAS No. | Weight-% | SARA 313 - Threshold

	CAS NO.	weight-%	Values %
2-Butoxyethanol	111-76-2	30 - 60	1.0

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

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

US State Regulations

Chemical name	Massachusetts
2-Butoxyethanol 111-76-2	X
Titanium Dioxide 13463-67-7	X

	Minnesota Right To Know
2-Butoxyethanol 111-76-2	X
Titanium Dioxide 13463-67-7	X

Chemical name	New Jersey
2-Butoxyethanol 111-76-2	X
Titanium Dioxide 13463-67-7	x

Chemical name	Pennsylvania
2-Butoxyethanol 111-76-2	x
Titanium Dioxide 13463-67-7	X

California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm

Chemical name	California Proposition 65
Titanium Dioxide	Carcinogen

<u>Canada</u>

Chemical name	NPRI - National Pollutant Release Inventory
2-Butoxyethanol	Part 1, Group A Substance
111-76-2	Part 5 Substance - Volatile Organic Compounds with Additional

Reporting Requirements Part 4 Substance - Criteria Air Contaminants

16. OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

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 Legend
 - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

 TWA
 TWA (time-weighted average)

 STEL
 STEL (Short Term Exposure Limit)

 Ceiling
 Maximum limit value

ACGIH: (American Conference of Governmental Industrial Hygienists)

A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
IARC: (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans
Group 2A - Probably Carcinogenic to Humans
Group 3 - Not Classifiable as to Carcinogenicity in Humans
NTP: (National Toxicity Program)
Known - Known Carcinogen
Reasonably Anticipated to be a Human Carcinogen
OSHA: (Occupational Safety & Health Administration)
X - Present

Revision Date

Pursuant to NOM-018-STPS-2015

This information within is considered correct but is not exhaustive and will be used for guidance only, which is based on the current knowledge of the substance or mixture and is applicable to the appropriate safety precautions for the product.

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 Safety Data Sheet