

SAFETY DATA SHEET

Print Date May-30-2015 Revision Date May-30-2015 Revision Number

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier	
Product code	7266
Product name	Violet
Product category	7200 Series Lacquer Screen Ink

None

<u>Other means of identification</u> Synonyms

Recommended use of the chemical and restrictions on useRecommended usePrinting operations

Details of the supplier of the safety data sheet

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 www.nazdar.com 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 24 Hour Emergency Phone Number

2. HAZARDS IDENTIFICATION

Classification

Skin Corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Reproductive toxicity	Category 2 - (H361)
Flammable liquids	Category 3 - (H226)

Label elements



Signal Word Warning

Hazard Statements

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H361 - Suspected of damaging fertility or the unborn child

H226 - Flammable liquid and vapor

Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Hazards not otherwise classified (HNOC)

May be harmful if swallowed. May be harmful in contact with skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Component	CAS-No	Weight %	Trade Secret	Note
Ethylene glycol monopropyl ether	2807-30-9	30 - 60	*	
2-Butoxyethanol	111-76-2	10 - 30	*	
Isopropyl alcohol	67-63-0	5 - 10	*	
Toluene	108-88-3	1 - 5	*	
Titanium dioxide	13463-67-7	< 0.5	*	

*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, includi	ng 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

Component	ACGIH TLV
2-Butoxyethanol 111-76-2	TWA: 20 ppm
Isopropyl alcohol 67-63-0	TWA: 200 ppm STEL: 400 ppm
Toluene 108-88-3	TWA: 20 ppm
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³

Component	OSHA PEL
2-Butoxyethanol	TWA: 25 ppm
111-76-2	TWA: 120 mg/m ³
	TWA: 50 ppm
	TWA: 240 mg/m ³
	Skin
Isopropyl alcohol	TWA: 400 ppm
67-63-0	TWA: 980 mg/m ³
	STEL: 500 ppm
	STEL: 1225 mg/m ³
Toluene	TWA: 100 ppm
108-88-3	TWA: 375 mg/m ³
	STEL: 150 ppm
	STEL: 560 mg/m ³
	TWA: 200 ppm
	Ceiling: 300 ppm

Titanium dioxide	TWA: 10 mg/m ³ (total dust)
13463-67-7	TWA: 15 mg/m ³ (total dust)

Component	Ontario TWAEV
Ethylene glycol monopropyl ether 2807-30-9	TWA: 25 ppm TWA: 110 mg/m ³ Skin
2-Butoxyethanol 111-76-2	TWA: 20 ppm
lsopropyl alcohol 67-63-0	TWA: 200 ppm STEL: 400 ppm
Toluene 108-88-3	TWA: 20 ppm
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³ (total dust)

Component	Mexico OEL (TWA)
2-Butoxyethanol	TWA/LMPE-PPT: 26 ppm
111-76-2	TWA/LMPE-PPT: 120 mg/m ³
	STEL/LMPE-CT: 75 ppm
	STEL/LMPE-CT: 360 mg/m ³
Isopropyl alcohol	TWA/LMPE-PPT: 400 ppm
67-63-0	TWA/LMPE-PPT: 980 mg/m ³
	STEL/LMPE-CT: 500 ppm
	STEL/LMPE-CT: 1225 mg/m ³
Toluene	TWA/LMPE-PPT: 50 ppm
108-88-3	TWA/LMPE-PPT: 188 mg/m ³
Titanium dioxide	TWA/LMPE-PPT: 10 mg/m ³ (as Ti)
13463-67-7	STEL/LMPE-CT: 20 mg/m ³ (as Ti)

Appropriate engineering controls

Engineering Measures Provide a good standard of general ventilation. Natural ventilation is from doors, windows etc. Controlled ventilation means air is supplied or removed by a powered fan. Users are advised to consider national Occupational Exposure Limits or other equivalent values. In case of insufficient ventilation, wear suitable respiratory equipment. Individual protection measures, such as personal protective equipment **Eye/face Protection** Wear safety glasses with side shields (or goggles). If splashes are likely to occur:. Wear suitable face shield. Ensure that eyewash stations and safety showers are close to the workstation location. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, **Skin Protection** as appropriate, to prevent skin contact. **Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations. Handle in accordance with good industrial hygiene and safety practice. Wash hands before **General Hygiene Considerations** 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

<u>Information on basic physical and</u> Physical State Odor	<u>chemical properties</u> Liquid Characteristic	Appearance Odor Threshold	Colored Liquid No information available
<u>Property</u> pH Melting point/freezing point	<u>Values</u>	Remarks • Method No data available No data available	

VOC by woight %	VOC by volume %	
Weight Per Gallon (Ibs/gal)	8.69	
Photochemically Reactive	No	
Other Information		
Oxidizing Properties	No data available	
Explosive Properties	No data available	
Dynamic viscosity		No data available
Kinematic viscosity		No data available
Decomposition temperature		No data available
Autoignition Temperature		No data available
Partition coefficient: n-octanol	/water	No data available
Solubility in other solvents		No data available
Water Solubility		No data available
Specific Gravity	1.04	
Vapor Density		No data available
Vapor Pressure		No data available
Lower flammability limit		No data available
Upper flammability limit		No data available
Flammability Limit in Air		
Evaporation rate	32 0 / 30 1	No data available
Flash Point	32 °C / 90 °F	Tag closed cup
Boiling point/Boiling Range	> 149 °C / 300 °F	

	VOC by weight %	VOC by volume %	VOC lbs/gal	VOC grams/liter
	(less water)	(less water)	(less water)	(less water)
	53.72	54.25	4.67	559.73
_ L	••••	•••=•		

10. STABILITY AND REACTIVITY

Reactivity

No information available.

Chemical stability

Stable under normal conditions.

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	There is no data for this product.
Eye Contact	There is no data for this product.
Skin Contact	There is no data for this product.
Ingestion	There is no data for this product.

Component	Oral LD50
Ethylene glycol monopropyl ether 2807-30-9	3089 mg/kg (Rat)
2-Butoxyethanol 111-76-2	470 mg/kg (Rat)

Isopropyl alcohol 67-63-0	4396 mg/kg (Rat)
Toluene 108-88-3	636 mg/kg (Rat)
Titanium dioxide 13463-67-7	>10000 mg/kg (Rat)

Component	LD50 Dermal
Ethylene glycol monopropyl ether 2807-30-9	960 μL/kg (Rabbit)
2-Butoxyethanol	2270 mg/kg (Rat)
111-76-2	220 mg/kg (Rabbit)
Isopropyl alcohol	12870 mg/kg (Rabbit)
67-63-0	12800 mg/kg (Rat)
Toluene	12124 mg/kg (Rat)
108-88-3	8390 mg/kg (Rabbit)
Component	Inhalation C50

Component	Inhalation LC50
2-Butoxyethanol	2.21 mg/L (Rat)4 h
111-76-2	450 ppm (Rat) 4 h
Isopropyl alcohol	72.6 mg/L (Rat)4 h
67-63-0	- · · ·
Toluene	12.5 mg/L (Rat)4 h
108-88-3	>26700 ppm (Rat) 1 h

Information on toxicological effects

Symptoms

There is no data for this product.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	There is no data for this product.	
Eye damage/irritation	There is no data for this product.	
Irritation	There is no data for this product.	
Corrosivity	There is no data for this product.	
Sensitisation	There is no data for this product.	
Mutagenic Effects	There is no data for this product.	
Reproductive Effects	There is no data for this product.	
STOT - single exposure	There is no data for this product.	
STOT - repeated exposure	There is no data for this product.	
Chronic Toxicity	There is no data for this product	
Aspiration hazard	There is no data for this product.	
Carcinogenicity	The table below indicates whethe	r each agency has listed any ingredient as a carcinogen.
Component		ACGIH
2-Butoxyethanol		A3
111-76-2		

Component	IARC
Titanium dioxide 13463-67-7	Group 2B

Component	OSHA
Titanium dioxide	Х
13463-67-7	

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	2,407.00 mg/kg
ATEmix (dermal)	2,487.00 mg/kg
ATEmix (inhalation-dust/mist)	17.70 mg/l
ATEmix (inhalation-vapor)	94.00 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity None known

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

Component	Algae/aquatic plants
Isopropyl alcohol	72h EC50 Desmodesmus subspicatus: >1000 mg/L
67-63-0	96h EC50 Desmodesmus subspicatus: >1000 mg/L
Toluene	72h EC50 Pseudokirchneriella subcapitata: 12.5 mg/L [static]
108-88-3	96h EC50 Pseudokirchneriella subcapitata: 433 mg/L
Component	Fish
2-Butoxyethanol	96h LC50 Lepomis macrochirus: 1490 mg/L [static]
111-76-2	96h LC50 Lepomis macrochirus: 2950 mg/L
Isopropyl alcohol	96h LC50 Pimephales promelas: 11130 mg/L [static]
67-63-0	96h LC50 Pimephales promelas: 9640 mg/L [flow-through]
	96h LC50 Lepomis macrochirus: >1400000 μg/L
Toluene	96h LC50 Lepomis macrochirus: 11.0 - 15.0 mg/L [static]
108-88-3	96h LC50 Oncorhynchus mykiss: 14.1 - 17.16 mg/L [static]
	96h LC50 Pimephales promelas: 15.22 - 19.05 mg/L
	[flow-through]
	96h LC50 Oncorhynchus mykiss: 5.89 - 7.81 mg/L [flow-through]
	96h LC50 Poecilia reticulata: 50.87 - 70.34 mg/L [static]
	96h LC50 Pimephales promelas: 12.6 mg/L [static]
	96h LC50 Poecilia reticulata: 28.2 mg/L [semi-static]
	96h LC50 Oncorhynchus mykiss: 5.8 mg/L [semi-static]
	96h LC50 Oryzias latipes: 54 mg/L [static]

Component	Crustacea
2-Butoxyethanol	24h EC50 Daphnia magna: 1698 - 1940 mg/L
111-76-2	48h EC50 Daphnia magna: >1000 mg/L
Isopropyl alcohol 67-63-0	48h EC50 Daphnia magna: 13299 mg/L
Toluene	48h EC50 Daphnia magna: 5.46 - 9.83 mg/L [static]
108-88-3	48h EC50 Daphnia magna: 11.5 mg/L

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Component	Partition coefficient
2-Butoxyethanol 111-76-2	0.81
Isopropyl alcohol 67-63-0	0.05
Toluene 108-88-3	2.65

Other adverse effects

No information available

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

DOT

UN/ID no.	UN1210
Proper Shipping Name	Printing Ink
Hazard Class	3
Packing Group	III
ICAO / IATA / IMDG / IMO	
UN/ID no.	UN1210
Proper Shipping Name	Printing Ink
Hazard Class	3
Packing Group	111

15. REGULATORY INFORMATION

International Inventories

All components are listed 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.

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Ethylene glycol monopropyl ether	2807-30-9	30 - 60	1.0
2-Butoxyethanol	111-76-2	10 - 30	1.0
Toluene	108-88-3	1 - 5	1.0

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

This product contains the following substances which are listed hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act:.

Component	CAS-No	Weight %
Ethylene glycol monopropyl ether	2807-30-9	30 - 60
Toluene	108-88-3	1 - 5

U.S. State Regulations

Component	Massachusetts Right To Know
2-Butoxyethanol 111-76-2	X
Isopropyl alcohol 67-63-0	X
Toluene 108-88-3	X
Titanium dioxide 13463-67-7	X

Component	Minnesota Right To Know
2-Butoxyethanol 111-76-2	X
Isopropyl alcohol 67-63-0	X
Toluene 108-88-3	X
Titanium dioxide 13463-67-7	X

Component

New Jersey

	Right To Know
Ethylene glycol monopropyl ether 2807-30-9	X
2-Butoxyethanol 111-76-2	X
Isopropyl alcohol 67-63-0	X
Toluene 108-88-3	X
Titanium dioxide 13463-67-7	X

Component	Pennsylvania Right To Know
Ethylene glycol monopropyl ether 2807-30-9	X
2-Butoxyethanol 111-76-2	X
Isopropyl alcohol 67-63-0	X
Toluene 108-88-3	X
Titanium dioxide 13463-67-7	X

California Prop. 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

Component		California Prop. 65	
Toluene		Developmental	
		Female Reproductive	
	Titanium dioxide	Carcinogen	
	This product contains titanium disvide in a nen receivable form Inho	lation of the nium diavida is unlikely to accur from averagium to this product	

This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product

Canada

Component	NPRI - National Pollutant Release Inventory
Ethylene glycol monopropyl ether 2807-30-9	Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999
2-Butoxyethanol 111-76-2	Part 1, Group A Substance Part 5, Individual Substances Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999
Isopropyl alcohol 67-63-0	Part 1, Group A Substance Part 5, Individual Substances Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999
Toluene 108-88-3	Part 1, Group A Substance Part 5, Individual Substances Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999

16. OTHER INFORMATION

HMIS:	Health	Flammability	Reactivity	Personal Protection
	2 *	3	0	Х

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

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 2B - Possibly Carcinogenic to Humans NTP: (National Toxicity Program) Known - Known Carcinogen Reasonably Anticipated to be a Human Carcinogen OSHA: (Occupational Safety & Health Administration) X - Present

Revision Date May-30-2015

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