

SAFETY DATA SHEET

Print Date May-31-2015 Revision Date May-30-2015 Revision Number

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

Product identifier Product code Product name Product category

79LF10 Primrose Yellow 7900 Series Corogloss Screen Ink

Other means of identification Synonyms

Recommended use of the chemical and restrictions on useRecommended usePrinting operations

None

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

Serious eye damage/eye irritation	Category 2 - (H319)
Aspiration toxicity	Category 1 - (H304)
Flammable liquids	Category 3 - (H226)

Label elements



Danger

Hazard Statements

H304 - May be fatal if swallowed and enters airways H319 - Causes serious eye irritation H226 - Flammable liquid and vapor

Precautionary Statements

P331 - Do NOT induce vomiting

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Hazards not otherwise classified (HNOC)

May be harmful in contact with skin.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Component	CAS-No	Weight %	Trade Secret	Note
Petroleum naphtha, light aromatic	64742-95-6	10 - 30	*	
Naphtha (petroleum), heavy aromatic	64742-94-5	10 - 30	*	
1,2,4-Trimethylbenzene (constituent)	95-63-6	5 - 10	*	1
Diacetone alcohol	123-42-2	1 - 5	*	
Titanium dioxide	13463-67-7	1 - 5	*	
1,3,5-Trimethylbenzene (constituent)	108-67-8	1 - 5	*	1
Naphthalene (constituent)	91-20-3	1 - 5	*	1
Cumene (constituent)	98-82-8	1 - 5	*	1

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

Note 1. Type of chemical: Constituent

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
Diacetone alcohol 123-42-2	TWA: 50 ppm
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³
Naphthalene (constituent) 91-20-3	TWA: 10 ppm STEL: 15 ppm Skin
Cumene (constituent) 98-82-8	TWA: 50 ppm
Component	OSHA PEL
Diacetone alcohol 123-42-2	TWA: 50 ppm TWA: 240 mg/m ³
Titanium dioxide 13463-67-7	TWA: 10 mg/m³ (total dust) TWA: 15 mg/m³ (total dust)
Naphthalene (constituent) 91-20-3	TWA: 10 ppm TWA: 50 mg/m ³ STEL: 15 ppm STEL: 75 mg/m ³
Cumene (constituent) 98-82-8	TWA: 50 ppm TWA: 245 mg/m ³ Skin

Component	Ontario TWAEV		
Diacetone alcohol	TWA: 50 ppm		
123-42-2	TWA: 240 mg/m ³		
	STEL: 75 ppm		
	STEL: 360 mg/m ³		
Titanium dioxide	TWA: 10 mg/m ³ (total dust)		
13463-67-7			
Naphthalene (constituent)	TWA: 10 ppm		
91-20-3	STEL: 15 ppm		
	Skin		
Cumene (constituent)	TWA: 50 ppm		
98-82-8			

Component	Mexico OEL (TWA)
Diacetone alcohol	TWA/LMPE-PPT: 50 ppm
123-42-2	TWA/LMPE-PPT: 240 mg/m ³
	STEL/LMPE-CT: 75 ppm
	STEL/LMPE-CT: 360 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)
Naphthalene (constituent)	TWA/LMPE-PPT: 10 ppm
91-20-3	TWA/LMPE-PPT: 50 mg/m ³
	STEL/LMPE-CT: 15 ppm
	STEL/LMPE-CT: 75 mg/m ³
Cumene (constituent)	TWA/LMPE-PPT: 50 ppm
98-82-8	TWA/LMPE-PPT: 245 mg/m ³
	STEL/LMPE-CT: 75 ppm
	STEL/LMPE-CT: 365 mg/m ³

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, su	ch 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.
Skin Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, 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.
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.
	PHYSICAL AND CHEMICAL PROPERTIES

9. PHISICAL AND CHEMICAL PROPERTIES

Information on basic physical and 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 Boiling point/Boiling Range	<u>Values</u>	Remarks • Method No data available No data available	

Flash Point Evaporation rate Flammability Limit in Air	46 °C / 115 °F	Setaflash closed cup No data available
Upper flammability limit Lower flammability limit Vapor Pressure		No data available No data available No data available
Vapor Density Specific Gravity	1.06	No data available
Water Solubility Solubility in other solvents Partition coefficient: n-octanol/wate Autoignition Temperature Decomposition temperature Kinematic viscosity		No data available No data available No data available No data available No data available No data available
Dynamic viscosity		No data available
Explosive Properties Oxidizing Properties	No data available No data available	
Other Information		
Photochemically Reactive Weight Per Gallon (Ibs/gal)	Yes 8.82	

VOC by weight %	VOC by volume %	VOC lbs/gal	VOC grams/liter
(less water)	(less water)	(less water)	(less water)
45.24	49.31	4	478.82

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
Petroleum naphtha, light aromatic	8400 mg/kg (Rat)
64742-95-6	
Naphtha (petroleum), heavy aromatic	>5000 mg/kg (Rat)
64742-94-5	
1,2,4-Trimethylbenzene (constituent)	3400 mg/kg (Rat)

95-63-6	
Diacetone alcohol 123-42-2	4 g/kg (Rat)
Titanium dioxide 13463-67-7	>10000 mg/kg (Rat)
1,3,5-Trimethylbenzene (constituent) 108-67-8	5000 mg/kg (Rat)
Naphthalene (constituent) 91-20-3	490 mg/kg (Rat)
Cumene (constituent) 98-82-8	1400 mg/kg (Rat)
Component	LD50 Dermal
Petroleum naphtha, light aromatic 64742-95-6	>2000 mg/kg (Rabbit)
Naphtha (petroleum), heavy aromatic 64742-94-5	>2000 mg/kg (Rabbit)
1,2,4-Trimethylbenzene (constituent) 95-63-6	>3160 mg/kg (Rabbit)
Diacetone alcohol 123-42-2	13500 mg/kg (Rabbit)
Naphthalene (constituent)	>2500 mg/kg (Rat)

	>2500 mg/kg (Rat)
91-20-3	>20 g/kg (Rabbit)
Cumene (constituent)	>3160 mg/kg (Rabbit)
98-82-8	
Component	Inhalation LC50
Petroleum naphtha, light aromatic	3400 ppm (Rat)4 h

component	
Petroleum naphtha, light aromatic 64742-95-6	3400 ppm (Rat)4 h >5.2 mg/L (Rat)4 h
Naphtha (petroleum), heavy aromatic 64742-94-5	>590 mg/m³(Rat)4 h
1,2,4-Trimethylbenzene (constituent) 95-63-6	18 g/m³(Rat)4 h
1,3,5-Trimethylbenzene (constituent) 108-67-8	24 g/m³(Rat)4 h
Naphthalene (constituent) 91-20-3	>340 mg/m³(Rat)1 h
Cumene (constituent) 98-82-8	39000 mg/m³(Rat)4 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 whether each agency has listed any ingredient as a carcinogen.

Component	IARC
Titanium dioxide 13463-67-7	Group 2B
Naphthalene (constituent) 91-20-3	Group 2B
Cumene (constituent) 98-82-8	Group 2B

Component	NTP
Naphthalene (constituent)	Reasonably Anticipated
91-20-3	
Component	OSHA
Titanium dioxide 13463-67-7	X
Naphthalene (constituent) 91-20-3	X
Cumene (constituent) 98-82-8	X

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	11,937.00 mg/kg
ATEmix (dermal)	4,861.00 mg/kg
ATEmix (inhalation-dust/mist)	24.30 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
Naphthalene (constituent) 91-20-3	72h EC50 Skeletonema costatum: 0.4 mg/L
Cumene (constituent) 98-82-8	72h EC50 Pseudokirchneriella subcapitata: 2.6 mg/L

Component	Fish
Petroleum naphtha, light aromatic 64742-95-6	96h LC50 Oncorhynchus mykiss: 9.22 mg/L
1,2,4-Trimethylbenzene (constituent) 95-63-6	96h LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through]
Diacetone alcohol 123-42-2	96h LC50 Lepomis macrochirus: 420 mg/L 96h LC50 Lepomis macrochirus: 420 mg/L [static]
1,3,5-Trimethylbenzene (constituent) 108-67-8	96h LC50 Pimephales promelas: 3.48 mg/L
Naphthalene (constituent) 91-20-3	96h LC50 Oncorhynchus mykiss: 0.91 - 2.82 mg/L [static] 96h LC50 Pimephales promelas: 5.74 - 6.44 mg/L [flow-through] 96h LC50 Oncorhynchus mykiss: 1.6 mg/L [flow-through] 96h LC50 Pimephales promelas: 1.99 mg/L [static] 96h LC50 Lepomis macrochirus: 31.0265 mg/L [static]
Cumene (constituent) 98-82-8	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]

Component	Crustacea
1,2,4-Trimethylbenzene (constituent) 95-63-6	48h EC50 Daphnia magna: 6.14 mg/L
Diacetone alcohol 123-42-2	24h EC50 Daphnia magna: 8750 mg/L
1,3,5-Trimethylbenzene (constituent) 108-67-8	24h EC50 Daphnia magna: 50 mg/L
Naphthalene (constituent) 91-20-3	48h EC50 Daphnia magna: 1.09 - 3.4 mg/L [static] 48h EC50 Daphnia magna: 1.96 mg/L [Flow through] 48h LC50 Daphnia magna: 2.16 mg/L
Cumene (constituent) 98-82-8	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.

Component	Partition coefficient
Naphtha (petroleum), heavy aromatic 64742-94-5	4.5
1,2,4-Trimethylbenzene (constituent) 95-63-6	3.63
Diacetone alcohol 123-42-2	1.03
Naphthalene (constituent) 91-20-3	3.3
Cumene (constituent) 98-82-8	3.55

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

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.ComponentCAS-NoWeight %SARA 313 - Threshold

component	CASINO	Weight //	Values	
1,2,4-Trimethylbenzene (constituent)	95-63-6	5 - 10	1.0	

Naphthalene (constituent)	91-20-3	1 - 5	0.1
Cumene (constituent)	98-82-8	1 - 5	1.0

<u>Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)</u> 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 %
Naphthalene (constituent)	91-20-3	1 - 5
Cumene (constituent)	98-82-8	1 - 5

U.S. State Regulations

Component	Massachusetts Right To Know
1,2,4-Trimethylbenzene (constituent) 95-63-6	X
Diacetone alcohol 123-42-2	X
Titanium dioxide 13463-67-7	X
1,3,5-Trimethylbenzene (constituent) 108-67-8	X
Naphthalene (constituent) 91-20-3	X
Cumene (constituent) 98-82-8	X

Component	Minnesota Right To Know
1,2,4-Trimethylbenzene (constituent) 95-63-6	X
Diacetone alcohol 123-42-2	X
Titanium dioxide 13463-67-7	X
Naphthalene (constituent) 91-20-3	X
Cumene (constituent) 98-82-8	X

Component	New Jersey Right To Know
1,2,4-Trimethylbenzene (constituent) 95-63-6	X
Diacetone alcohol 123-42-2	X
Titanium dioxide 13463-67-7	X
Naphthalene (constituent) 91-20-3	X
Cumene (constituent) 98-82-8	Х

Component	Pennsylvania Right To Know
1,2,4-Trimethylbenzene (constituent) 95-63-6	X
Diacetone alcohol 123-42-2	X
Titanium dioxide 13463-67-7	X
Naphthalene (constituent) 91-20-3	X
Cumene (constituent) 98-82-8	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
Titanium dioxide	Carcinogen
Naphthalene (constituent)	Carcinogen
Cumene (constituent)	Carcinogen

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
Petroleum naphtha, light aromatic 64742-95-6	Part 5, Other Groups and Mixtures
Naphtha (petroleum), heavy aromatic 64742-94-5	Part 5, Other Groups and Mixtures 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
1,2,4-Trimethylbenzene (constituent) 95-63-6	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
Diacetone alcohol 123-42-2	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
1,3,5-Trimethylbenzene (constituent) 108-67-8	Part 5, Isomer Groups total of 1,2,3-Trimethylbenzene, CAS No. 526-73-8, and 1,3,5-Trimethylbenzene, CAS No. 108-67-8, except 1,2,4-Trimethylbenzene, CAS No. 95-63-6 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
Naphthalene (constituent) 91-20-3	Part 1, Group A Substance 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
Cumene (constituent) 98-82-8	Part 1, Group A Substance 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 *	2	0	X

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