HS Graph. Arts

NAZDAR Ink Technologies

Material Safety Data Sheet

Prepared in accordance with ISO 11014-1/ANSI standard Z400.1-2004

Print Date Aug-27-2012 **Revision Date** Aug-27-2012

1. PRODUCT AND COMPANY IDENTIFICATION

Product code IMS201
Product name Premium Graphic Screen Wash
Product category ImageStar®

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
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 Water-white
Flammable Properties Combustible liquid and vapor.
Emergency Overview Irritant. May cause drowsiness and dizziness.

Eyes Severe eye irritant. The liquid splashed in the eyes may cause irritation and reversible damage.
Skin May cause skin irritation and/or dermatitis. May be absorbed through the skin in harmful amounts.
Inhalation May cause irritation of respiratory tract. Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
Ingestion Harmful if swallowed. Potential for aspiration if swallowed. Risk of serious damage to the lungs (by aspiration).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Naphtha (petroleum), heavy aromatic	64742-94-5	10 - 30
1-Methyl-2-pyrrolidone	872-50-4	10 - 30
Dipropylene glycol monomethyl ether acetate	88917-22-0	10 - 30
Dimethyl Glutarate	1119-40-0	10 - 30
D-Limonene	5989-27-5	10 - 30
Polyethylene glycol octylphenyl ether	9036-19-5	5 - 10
Dimethyl Adipate	627-93-0	1 - 5
Dimethyl Succinate	106-65-0	1 - 5
Naphthalene (contaminant)	91-20-3	1 - 5
1,2,4-Trimethylbenzene (contaminant)	95-63-6	< 0.5

• 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.

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 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. 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. 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. Do not take internally. Harmful or fatal if swallowed. Take notice of the directions of use on the label.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Ontario TWAEV	Mexico OEL (TWA)
1-Methyl-2-pyrrolidone				TWA: 400 mg/m³	

Dipropylene glycol monomethyl ether acetate				TWA: 100 ppm TWA: 776 mg/m³ STEL: 150 ppm STEL: 1164 mg/m³	
Naphthalene (contaminant)	TWA: 10 ppm STEL: 15 ppm Skin	TWA: 10 ppm TWA: 50 mg/m³ STEL: 15 ppm STEL: 75 mg/m³	250 ppm	TWA: 10 ppm STEL: 15 ppm Skin	TWA/LMPE-PPT: 10 ppm TWA/LMPE-PPT: 50 mg/m³ STEL/LMPE-CT: 15 ppm STEL/LMPE-CT: 75 mg/m³

Engineering Measures 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. 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	Water-white	**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		

Flammability Limits in Air

Upper No information available

Lower No information available

Flash Point	64 °C / 148 °F	**Photochemically Reactive**	Yes
Method	Pensky Martens Closed Cup (PMCC)		
Weight Per Gallon (lbs/gal)	8.15	**Specific Gravity**	0.98
VOC by weight %	92	**VOC by volume %**	92.65
VOC lbs/gal (less water)	7.5	**VOC grams/liter (less water)**	898.81

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 (CO2). Carbon monoxide.

Possibility of Hazardous Reactions None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Naphtha (petroleum), heavy aromatic	>5000 mg/kg (Rat)	>2000 mg/kg (Rabbit)	>590 mg/m³ (Rat) 4 h
1-Methyl-2-pyrrolidone	3598 mg/kg (Rat)	>5000 mg/kg (Rabbit) 2500 mg/kg (Rat)	3.1 mg/L (Rat) 4 h
Dimethyl Glutarate	8191 mg/kg (Rat)		>5.6 mg/L (Rat) 4 h
D-Limonene	4400 mg/kg (Rat)	>2000 mg/kg (Rabbit)	
Polyethylene glycol octylphenyl ether	4190 mg/kg (Rat)		
Dimethyl Adipate	1920 mg/kg (Rat)		
Dimethyl Succinate	>5000 mg/kg (Rat)	>5000 mg/kg (Rabbit)	
Naphthalene (contaminant)	490 mg/kg (Rat)	>2500 mg/kg (Rat) >20 g/kg (Rabbit)	>340 mg/m³ (Rat) 1 h
1,2,4-Trimethylbenzene (contaminant)	3400 mg/kg (Rat)	>3160 mg/kg (Rabbit)	18 g/m³ (Rat) 4 h

Chronic Toxicity

Component	ACGIH	IARC	NTP	OSHA
Naphthalene (contaminant)		Group 2B	Reasonably Anticipated	X

IARC: (International Agency for Research on Cancer) *Group 2B - Possibly Carcinogenic to Humans*
NTP: (National Toxicity Program) *Reasonably Anticipated to be a Human Carcinogen*
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.
Target Organ Effects Blood, Central nervous system, Eyes, Kidney, Liver, 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	Algae	Fish	Water Flea
Naphtha (petroleum), heavy aromatic		96h LC50 Lepomis macrochirus: 1740 mg/L [static] 96h LC50 Pimephales promelas: 19 mg/L [static] 96h LC50 Pimephales promelas: 41 mg/L 96h LC50 Pimephales promelas: 45 mg/L [flow-through]	

1-Methyl-2-pyrrolidone	72h EC50 Desmodesmus subspicatus: >500 mg/L	96h LC50 Pimephales promelas: 1072 mg/L [static] 96h LC50 Poecilia reticulata: 1400 mg/L [static] 96h LC50 Leuciscus idus: 4000 mg/L [static] 96h LC50 Lepomis macrochirus: 832 mg/L [static]	48h EC50 Daphnia magna: 4897 mg/L
Dimethyl Glutarate		96h LC50 Pimephales promelas: 19.6 - 26.2 mg/L [static]	48h EC50 Daphnia magna: 122.1 - 163.5 mg/L
D-Limonene		96h LC50 Pimephales promelas: 0.619 - 0.796 mg/L [flow-through] 96h LC50 Oncorhynchus mykiss: 35 mg/L	
Dimethyl Succinate		96h LC50 Brachydanio rerio: 50 - 100 mg/L [static]	
Naphthalene (contaminant)	72h EC50 Skeletonema costatum: 0.4 mg/L	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]	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
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

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

Component	log Pow
Naphtha (petroleum), heavy aromatic	4.5
1-Methyl-2-pyrrolidone	-0.46
Dimethyl Succinate	0.19
Naphthalene (contaminant)	3.3
1,2,4-Trimethylbenzene (contaminant)	3.63

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

Printing Ink Related Material, Liquid, Not Regulated

ICAO/IATA

Not classified as dangerous in the meaning of transport regulations

IMDG/IMO

Not classified as dangerous in the meaning of transport regulations

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
1-Methyl-2-pyrrolidone	872-50-4	10 - 30	1.0
Naphthalene (contaminant)	91-20-3	1 - 5	0.1

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

Component	CAS-No	Weight %
Naphthalene (contaminant)	91-20-3	1 - 5

U.S. State Regulations

Component	Massachusetts Right To Know	Minnesota Right To Know	New Jersey Right To Know	Pennsylvania Right To Know
1-Methyl-2-pyrrolidone	X	Not Listed	X	X
Naphthalene (contaminant)	X	X	X	X
1,2,4-Trimethylbenzene (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 %
1-Methyl-2-pyrrolidone	872-50-4	10 - 30
Naphthalene (contaminant)	91-20-3	1 - 5

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
1-Methyl-2-pyrrolidone	B3,D2B
D-Limonene	B3,D2B
Polyethylene glycol octylphenyl ether	D2B
Naphthalene (contaminant)	B4,D2A
1,2,4-Trimethylbenzene (contaminant)	B3

Component	NPRI - National Pollutant Release Inventory
Naphtha (petroleum), heavy aromatic	Part 5 Substance Part 5, Other Groups and Mixtures
1-Methyl-2-pyrrolidone	Part 4 Substance Part 1, Group 1 Substance
Dimethyl Glutarate	Part 4 Substance
D-Limonene	Part 5 Substance Part 5, Individual Substance
Polyethylene glycol octylphenyl ether	Part 1, Group 1 Substance
Dimethyl Adipate	Part 4 Substance
Dimethyl Succinate	Part 4 Substance
Naphthalene (contaminant)	Part 1, Group 1 Substance
1,2,4-Trimethylbenzene (contaminant)	Part 4 Substance Part 1, Group 1 Substance Part 5, Individual Substance

Regulation (EC) No. 1907/2006 (REACH), Article 57

This product contains substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57)

Component	CAS-No	Weight %
1-Methyl-2-pyrrolidone	872-50-4	10 - 30

HMIS:	Health	Flammability	Reactivity	PPE
	2 *	2	0	X

16. OTHER INFORMATION

Revision Date Aug-27-2012

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