

SAFETY DATA SHEET

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1. IDENTIFICATION

Product identifier

Product code 4724
Product name Black

Product category 4700 Series Water-Based Screen Ink

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use
Recommended use Industrial Printing Operations

Details of the supplier of the safety data sheet

UNITED STATES
UNITED KINGDOM
Nazdar Company
Nazdar Limited
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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

Skin corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Skin sensitization	Category 1 - (H317)
Chronic aquatic toxicity	Category 2 - (H411)

Label elements





Signal word Warning

Hazard statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements

P264 - Wash face, hands and any exposed skin thoroughly after handling

P273 - Avoid release to the environment

P280 - Wear protective gloves and eye/face protection

P337 + P313 - If eye irritation persists: Get medical advice/attention

Hazards not otherwise classified (HNOC)

Toxic to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Ingestion

Chemical name	CAS No.	Weight-%	Trade	Note
			secret	
Carbon black	1333-86-4	1 - 5	*	
Dipropylene glycol monomethyl ether	34590-94-8	1 - 5	*	
2-(Dimethylamino)ethanol	108-01-0	1 - 5	*	
Nonylphenol, branched, ethoxylated	68412-54-4	0.1 - < 1	*	
Additive	Not Available	0.1 - < 1	*	
2,4,7,9-Tetramethyl-5-decyne-4,7-diol	126-86-3	0.1 - < 1	*	
Isononylphenol, ethoxylated	37205-87-1	0.1 - < 1	*	

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

4. FIRST-AID MEASURES

Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance.

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 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. Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or

InhalationRemove person to fresh air and keep comfortable for breathing. If breathing i stopped, administer artificial respiration. Get medical attention immediately.

Stopped, administer artificial respiration. Set medical attention infinediately.

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

HandlingUse 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. Do not freeze.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Chemical name	ACGIH TLV
	TWA: 3 mg/m³ inhalable particulate matter
1333-86-4	
Dipropylene glycol monomethyl ether	TWA: 50 ppm
34590-94-8	

Chemical name	OSHA PEL
Carbon black	TWA: 3.5 mg/m ³
1333-86-4	
Dipropylene glycol monomethyl ether	TWA: 100 ppm
34590-94-8	TWA: 600 mg/m ³
	Skin

Chemical name	OSHA PEL (vacated)
Carbon black	TWA: 3.5 mg/m ³
1333-86-4	
Dipropylene glycol monomethyl ether	TWA: 100 ppm
34590-94-8	TWA: 600 mg/m ³
	STEL: 150 ppm

STEL: 900 mg/m ³
Skin

Chemical name	Ontario TWAEV
Carbon black	TWA: 3 mg/m³ inhalable particulate matter
1333-86-4	
Dipropylene glycol monomethyl ether	TWA: 100 ppm
34590-94-8	STEL: 150 ppm
	Skin
2-(Dimethylamino)ethanol	TWA: 3 ppm
108-01-0	TWA: 11 mg/m ³
	STEL: 6 ppm
	STEL: 22 mg/m ³

Chemical name	Mexico OEL (TWA)
Carbon black	TWA/VLE-PPT: 3 mg/m³ inhalable fraction
1333-86-4	
Dipropylene glycol monomethyl ether	TWA/VLE-PPT: 100 ppm
34590-94-8	STEL/PPT-CT: 150 ppm

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.

Skin Protection Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as

appropriate, to prevent skin contact.

Hand Protection Chemical resistant protective gloves.

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding >480 minutes of permeation time): eg. nitrile rubber (0.4 mm), chloroprene

rubber (0.5 mm), polyvinylchloride (0.7 mm) and other

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers. Taking into account the varying conditions, the practical usage of a

chemical-protective glove in practice may be much shorter than the permeation time

determined through testing.

Due to different glove types, the manufacturer's directions for use should be observed. Replace gloves immediately when torn or any change in appearance is noticed such as

dimension, color, flexibility.

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. Selection of air-purifying or positive-pressure supplied-air will depend on the specific operation and the potential airborne concentration of

the material.

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 chemical properties

Physical state Liquid Appearance Colored

Odor No information available Odor Threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No data available

Melting Point / Freezing Point No information available

Boiling Point / Boiling Range > 100 °C / 212 °F

Boiling Point / Boiling Range > 100 °C / 212 °F Flash Point > 94 °C / > 201 °F Setaflash closed cup

Evaporation rate No data available

Flammability Limit in Air

Upper flammability limit
Lower flammability limit
No data available
Vapor Pressure
No data available

Vapor Density
No data available
Specific Gravity
1.06

Water SolubilityNo data availableSolubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data available

Autoignition Temperature No information available No data available

HyphenNo data availableKinematic viscosityNo data availableDynamic viscosityNo data available

Explosive Properties No data available Oxidizing Properties No data available

Other information

Photochemically Reactive No Weight Per Gallon (lbs/gal) 8.82

VOC by weight % (less water) 16.78	VOC by volume % (less water) No information available	VOC lbs/gal (less water) 1.48	VOC grams/liter (less water) 177.38
Volatile by weight % (including Water) 60.12	Water by weight % 52.71		

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. Do not freeze.

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

InhalationSpecific test data for the substance or mixture is not available.Eye ContactSpecific test data for the substance or mixture is not available.Skin ContactSpecific test data for the substance or mixture is not available.IngestionSpecific test data for the substance or mixture is not available.

Chemical name	Oral LD50	
Carbon black 1333-86-4	> 15400 mg/kg (Rat)	
Dipropylene glycol monomethyl ether 34590-94-8	= 5.35 g/kg (Rat)	
2-(Dimethylamino)ethanol 108-01-0	= 1803 mg/kg (Rat)	
Additive	= 1470 mg/kg (Rat)	
2,4,7,9-Tetramethyl-5-decyne-4,7-diol 126-86-3	> 500 mg/kg (Rat)	
Isononylphenol, ethoxylated 37205-87-1	= 2590 mg/kg (Rat)	

Chemical name	Dermal LD50
Dipropylene glycol monomethyl ether	= 9500 mg/kg (Rabbit)
34590-94-8	
2-(Dimethylamino)ethanol	= 1220 mg/kg (Rabbit)
108-01-0	
Additive	> 2000 mg/kg (Rat)
2,4,7,9-Tetramethyl-5-decyne-4,7-diol	> 1000 mg/kg (Rabbit)
126-86-3	
Isononylphenol, ethoxylated	= 2830 mg/kg (Rabbit)
37205-87-1	

Chemical name	Inhalation LC50
Carbon black	> 4.6 mg/m³ (Rat) 4 h
1333-86-4	
2-(Dimethylamino)ethanol	= 1641 ppm (Rat) 4 h
108-01-0	
Additive	= 0.67 mg/L (Rat) 4 h
	= 0.99 mg/L (Rat) 4 h
	= 0.63 mg/L (Rat)4 h
2,4,7,9-Tetramethyl-5-decyne-4,7-diol	> 20 mg/L (Rat)1 h
126-86-3	

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 short and long-term exposure

Skin corrosion/irritationSpecific 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.

(based on components).

IrritationSpecific test data for the substance or mixture is not available. **Corrosivity**Specific test data for the substance or mixture is not available.

Sensitization Specific test data for the substance or mixture is not available. May cause an allergic skin

reaction. (based on components).

Mutagenic EffectsSpecific test data for the substance or mixture is not available.Carcinogenic effectsSpecific test data for the substance or mixture is not available.Reproductive EffectsSpecific test data for the substance or mixture is not available.STOT - single exposureSpecific test data for the substance or mixture is not available.

STOT - repeated exposureSpecific test data for the substance or mixture is not available.Chronic ToxicitySpecific test data for the substance or mixture is not availableAspiration hazardSpecific 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.

	and the state of t
Chemical name	ACGIH
Carbon black	A3
1333-86-4	

Chemical name	IARC
Carbon black	Group 2B
1333-86-4	

Chemical name	OSHA
Carbon black	X
1333-86-4	

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)
 117,027.80

 ATEmix (dermal)
 79,186.80

 ATEmix (inhalation-gas)
 99,999.00

 ATEmix (inhalation-dust/mist)
 61.50

 ATEmix (inhalation-vapor)
 416.60

12. ECOLOGICAL INFORMATION

Ecotoxicity

Specific test data for the substance or mixture is not available. Toxic to aquatic life with long lasting effects. (based on components).

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

Chemical name	Algae/aquatic plants
2-(Dimethylamino)ethanol	72h EC50 Desmodesmus subspicatus: = 35 mg/L
108-01-0	, ,

Chemical name	Fish
Dipropylene glycol monomethyl ether	96h LC50 Pimephales promelas: > 10000 mg/L (static)
34590-94-8	
2-(Dimethylamino)ethanol	96h LC50 Pimephales promelas: = 81 mg/L (static)
108-01-0	
Nonylphenol, branched, ethoxylated	96h LC50 Pimephales promelas: = 0.323 mg/L (flow-through)
68412-54-4	
Additive	96h LC50 Lepomis macrochirus: 0.14 - 0.32 mg/L (flow-through)
	96h LC50 Oncorhynchus mykiss: 0.049 - 0.079 mg/L
	(flow-through)
	96h LC50 Oncorhynchus mykiss: 0.05 - 0.089 mg/L
	96h LC50 Pimephales promelas: 0.18 - 0.23 mg/L (flow-through)

Chemical name	Crustacea
Dipropylene glycol monomethyl ether	48h LC50 Daphnia magna: = 1919 mg/L
34590-94-8	
2-(Dimethylamino)ethanol	48h EC50 Daphnia magna: = 98.77 mg/L
108-01-0	

Persistence and Degradability

No information available.

Bioaccumulation

Chemical name	Partition coefficient
Dipropylene glycol monomethyl ether	-0.064
34590-94-8	
2-(Dimethylamino)ethanol	-0.55
108-01-0	

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 Not regulated

Exception: In the US and Canada except when all or part of the transportation is by vessel, containers 119 gallons/ 450 Liters and less are not regulated [see 49CFR 171.4 (c)(1)]

49CFR 171.4 (c)(2) applies only to marine pollutants. These items may be shipped as "not regulated" and no marine pollutant mark is required if in quantities of 5L or less (per inner packaging) for liquids or 5KG or less (per inner packaging) for solids and the packaging used meets the defined standards [see 49CFR 173.24 for general packaging requirements].

ICAO / IATA / IMDG / IMO Not Regulated

ICAO/IATA Special Provision A197 applies only to environmentally hazardous substances, UN3077 and UN3082. These items may be shipped as "not regulated" if in quantities of 5L or less (per inner packaging) for liquids or 5KG or less (per inner packaging) for solids and the packaging used meets the defined standards.

IMDG code 2.10.2.7 applies only to marine pollutants. These items may be shipped as "not regulated" and no marine pollutant mark is required if in quantities of 5L or less (per inner packaging) for liquids or 5KG or less (per inner packaging) for solids and the packaging used meets the defined standards.

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

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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

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:.

Chemical name	CAS No.	Weight-%
Diethylene glycol monobutyl ether	112-34-5	0.1 - < 1
Ethylene glycol	107-21-1	0.1 - < 1

US State Regulations

Chemical name	Massachusetts
Carbon black 1333-86-4	X
Dipropylene glycol monomethyl ether 34590-94-8	x
2-(Dimethylamino)ethanol 108-01-0	X

	Minnesota Right To Know
Carbon black 1333-86-4	X
Dipropylene glycol monomethyl ether 34590-94-8	Х

Chemical name	New Jersey
Carbon black	X
1333-86-4	
Dipropylene glycol monomethyl ether	X
34590-94-8	
2-(Dimethylamino)ethanol	X
108-01-0	
Additive	Χ

Chemical name	Pennsylvania
Carbon black	X
1333-86-4	
Dipropylene glycol monomethyl ether	X
34590-94-8	
2-(Dimethylamino)ethanol	X
108-01-0	

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
Carbon black	Carcinogen
Ethylene glycol	Developmental

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

Canada

Chemical name	NPRI - National Pollutant Release Inventory
Dipropylene glycol monomethyl ether	Part 5 Substance - Volatile Organic Compounds with Additional
34590-94-8	Reporting Requirements
	Part 4 Substance - Criteria Air Contaminants
2-(Dimethylamino)ethanol	Part 4 Substance - Criteria Air Contaminants

108-01-0	
Nonylphenol, branched, ethoxylated 68412-54-4	Part 1, Group B Substance
Isononylphenol, ethoxylated 37205-87-1	Part 1, Group B Substance

16. OTHER INFORMATION

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

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 Nov-13-2023

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