

SAFETY DATA SHEET

Published DateRevision DateRevision NumberJan-06-2021Jan-06-20212.5

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

Product identifier

Product code LWS204KK

Product name Black

Product category 204 Series Inkjet Ink

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use
Recommended use Printing operations

Details of the supplier of the safety data sheet

UNITED STATES
UNITED KINGDOM
Nazdar Company
Nazdar Limited
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Shawnee, KS 66227
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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

Serious eye damage/eye irritation	Category 1 - (H318)
Chronic aquatic toxicity	Category 3 - (H412)

Label elements



Signal Word Danger

Hazard Statements

H318 - Causes serious eye damage

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P273 - Avoid release to the environment

P280 - Wear protective gloves/protective clothing/eye protection/face protection

Hazards not otherwise classified (HNOC)

Harmful to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Component	CAS-No	Weight %	Trade Secret	Note
Diethylene glycol diethyl ether	112-36-7	60 - 100	*	
Butyrolactone	96-48-0	10 - 30	*	
Triethylene glycol monobutyl ether	143-22-6	5 - 10	*	
Carbon black	1333-86-4	1 - 5	*	
Additive	Trade Secret	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 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.

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

Component	ACGIH TLV
Carbon black	TWA: 3 mg/m ³ inhalable particulate matter
1333-86-4	
Component	OSHA PEL
Carbon black	TWA: 3.5 mg/m³
1333-86-4	·
Component	OSHA PEL (vacated)
Carbon black	TWA: 3.5 mg/m ³
1333-86-4	

Component	Ontario TWAEV
Carbon black	TWA: 3 mg/m³ inhalable particulate matter
1333-86-4	

Component	Mexico OEL (TWA)
Carbon black	TWA/VLE-PPT: 3 mg/m³ inhalable fraction
1333-86-4	_

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

Wear safety glasses with side shields (or goggles). If splashes are likely to occur:. Wear **Eye/Face Protection**

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.

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 Color Colored

Odor No information available **Odor Threshold** No information available

Property Values Remarks • Method

No data available pН **Melting Point / Freezing Point** No data available

Boiling Point / Boiling Range > 149 °C / 300 °F

Flash Point 78 °C / 172 °F Tag closed cup (Minimum) **Evaporation rate** No data available

Flammability Limit in Air

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

Vapor Density No data available **Specific Gravity** 0.97

Water Solubility No data available Solubility in other solvents No data available No data available

Partition coefficient: n-octanol/water **Autoignition Temperature** No data available **Decomposition temperature** No data available Kinematic viscosity No data available

Dynamic viscosity No data available

Explosive Properties No data available **Oxidizing Properties** No data available

Other Information

No **Photochemically Reactive** Weight Per Gallon (lbs/gal) 8.09

VOC by weight % (less water)	VOC by volume %	VOC lbs/gal	VOC grams/liter
	(less water)	(less water)	(less water)
90.24	91.66	7.31	` 875.65 ´

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

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.

Component	Oral LD50
Diethylene glycol diethyl ether 112-36-7	= 4970 mg/kg(Rat)
Butyrolactone 96-48-0	= 1540 mg/kg(Rat)
Triethylene glycol monobutyl ether 143-22-6	= 5300 mg/kg(Rat)
Carbon black 1333-86-4	> 15400 mg/kg (Rat)

Component	Dermal LD50
Butyrolactone	> 5640 mg/kg (Rabbit)
96-48-0	
Triethylene glycol monobutyl ether	> 2000 mg/kg (Rabbit)
143-22-6	

Component	Inhalation LC50
Butyrolactone	> 5100 mg/m³ (Rat) 4 h
96-48-0	
Carbon black	> 4.6 mg/m³ (Rat) 4 h
1333-86-4	· · ·

Information on toxicological effects

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/irritation Specific test data for the substance or mixture is not available.

Eye damage/irritation Specific test data for the substance or mixture is not available. Causes serious eye

	damage. (based on components).
Irritation	Specific 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.
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.

Component	ACGIH
Carbon black	A3
1333-86-4	

Component	IARC
Carbon black	Group 2B
1333-86-4	

Component	OSHA
Carbon black	X
1333-86-4	

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 1.63 % 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) 3,443.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

Specific test data for the substance or mixture is not available. Harmful 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

Component	Algae/aquatic plants
Butyrolactone	96h EC50 Desmodesmus subspicatus: = 79 mg/L
96-48-0	72h EC50 Desmodesmus subspicatus: = 360 mg/L
Triethylene glycol monobutyl ether	72h EC50 Desmodesmus subspicatus: > 500 mg/L
143-22-6	
Additive	72h EC50 Pseudokirchneriella subcapitata: = 0.25 mg/L

Component	Fish
Butyrolactone 96-48-0	96h LC50 Lepomis macrochirus: = 56 mg/L [static]
, , ,	96h LC50 Pimephales promelas: = 2400 mg/L 96h LC50 Pimephales promelas: = 2400 mg/L (static)

Component	Crustacea
Butyrolactone	48h EC50 Daphnia magna Straus: > 500 mg/L
96-48-0	
Triethylene glycol monobutyl ether	48h EC50 Daphnia magna: > 500 mg/L
143-22-6	

Persistence and Degradability

No information available.

Bioaccumulation

Component	Partition coefficient
Butyrolactone	-0.566
96-48-0	
Triethylene glycol monobutyl ether	0.51
143-22-6	

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

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 Proper Shipping Name Printing Ink

Proper Shipping Name Printing Ink

ICAO / IATA / IMDG / IMO
Proper Shipping Name
Not Regulated
Printing Ink

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
Diethylene glycol diethyl ether	112-36-7	60 - 100	1.0
Triethylene glycol monobutyl ether	143-22-6	5 - 10	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 %
Diethylene glycol diethyl ether	112-36-7	60 - 100
Triethylene glycol monobutyl ether	143-22-6	5 - 10

U.S. State Regulations

Component	Massachusetts
	Right To Know
Carbon black	Χ
1333-86-4	

	Minnesota Right To Know
Carbon black	X
1333-86-4	

Component	New Jersey
	Right To Know
Diethylene glycol diethyl ether	Χ
112-36-7	
Triethylene glycol monobutyl ether	X
143-22-6	
Carbon black	X
1333-86-4	

	Pennsylvania Right To Know
Diethylene glycol diethyl ether 112-36-7	X
Triethylene glycol monobutyl ether 143-22-6	X
Carbon black 1333-86-4	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			
Carbon black	Carcinogen			

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

Canada

Component	NPRI - National Pollutant Release Inventory	
Diethylene glycol diethyl ether 112-36-7	Part 4 Substance	
Butyrolactone 96-48-0	Part 4 Substance	

16. OTHER INFORMATION						
			_			
HMIS:	Health	Flammability	Reactivity	Personal Protection		

HMIS: Health Flammability Reactivity Personal Protection 3 * 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 Jan-06-2021

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