

SAFETY DATA SHEET

Published DateRevision DateRevision NumberMay-15-2019May-15-20192.5

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

Product identifier

Product code \$259

Product name Tinting Black

Product category System 2 Series SV Vinyl Screen 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
Barton Road
Heaton Mersey

Tel: +001-913-422-1888 Stockport, England SK4 3EG
Tel: +001-800-677-4657 Tel: +44 161 442 2111

Fax: +001-913-422-2294 www.nazdar.com

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 1 - (H318)
Flammable liquids	Category 3 - (H226)

Label elements





Signal Word Danger

Hazard Statements

H315 - Causes skin irritation

H318 - Causes serious eye damage H226 - Flammable liquid and vapor

Precautionary Statements

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

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P332 + P313 - If skin irritation occurs: Get medical advice/attention

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

P233 - Keep container tightly closed

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

P403 + P235 - Store in a well-ventilated place. Keep cool

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

Hazards not otherwise classified (HNOC)

No information available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Component	CAS-No	Weight %	Trade Secret	Note
Ethylene glycol monopropyl ether	2807-30-9	10 - 30	*	
Cyclohexanone	108-94-1	10 - 30	*	
Diethylene glycol ethyl ether acetate	112-15-2	1 - 5	*	
Ethylene glycol monobutyl ether acetate	112-07-2	1 - 5	*	
Carbon black	1333-86-4	1 - 5	*	
Ethyl alcohol	64-17-5	< 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 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

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.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure limits

Component	ACGIH TLV
Cyclohexanone	TWA: 20 ppm
108-94-1	STEL: 50 ppm
	Skin
Ethylene glycol monobutyl ether acetate	TWA: 20 ppm
112-07-2	
Carbon black	TWA: 3 mg/m³ inhalable particulate matter
1333-86-4	
Ethyl alcohol	STEL: 1000 ppm
64-17-5	

Component	OSHA PEL
Cyclohexanone	TWA: 50 ppm
108-94-1	TWA: 200 mg/m ³
Carbon black	TWA: 3.5 mg/m ³
1333-86-4	
Ethyl alcohol	TWA: 1000 ppm
64-17-5	TWA: 1900 mg/m ³

Component	OSHA PEL (vacated)	
Cyclohexanone	TWA: 25 ppm	
108-94-1	TWA: 100 mg/m ³	
	Skin	
Carbon black	TWA: 3.5 mg/m ³	

1333-86-4	
Ethyl alcohol	TWA: 1000 ppm
64-17-5	TWA: 1900 mg/m ³

Component	Ontario TWAEV
Ethylene glycol monopropyl ether	TWA: 25 ppm
2807-30-9	TWA: 110 mg/m ³
	Skin
Cyclohexanone	TWA: 20 ppm
108-94-1	STEL: 50 ppm
	Skin
Ethylene glycol monobutyl ether acetate	TWA: 20 ppm
112-07-2	
Carbon black	TWA: 3 mg/m³ inhalable
1333-86-4	
Ethyl alcohol	STEL: 1000 ppm
64-17-5	

Component	Mexico OEL (TWA)
Cyclohexanone	TWA/VLE-PPT: 50 ppm
108-94-1	TWA/VLE-PPT: 200 mg/m ³
	STEL/PPT-CT: 100 ppm
	STEL/PPT-CT: 400 mg/m ³
Carbon black	TWA/VLE-PPT: 3.5 mg/m ³
1333-86-4	STEL/PPT-CT: 7 mg/m³
Ethyl alcohol	TWA/VLE-PPT: 1000 ppm
64-17-5	TWA/VLE-PPT: 1900 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, 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 Liquid

Odor Characteristic Odor Threshold No information available

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

pH No data available

Melting Point / Freezing Point No data available

Melting Point / Freezing Point No data availal Boiling Point / Boiling Range > 149 °C / 300 °F

Flash Point 46 °C / 115 °F Pensky Martens Closed Cup (PMCC)

Evaporation rate No data available

Flammability Limit in Air

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

Specific Gravity 1.05

Water SolubilityNo data availableSolubility in other solventsNo data availablePartition coefficient: n-octanol/waterNo data availableAutoignition TemperatureNo data availableDecomposition temperatureNo 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) 8.77

	VOC by weight %	VOC by volume %	VOC lbs/gal	VOC grams/liter
١	(less water)	(less water)	(less water)	(less water)
١	59.27	60.25	5.2	623.3

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	
Ethylene glycol monopropyl ether	= 3089 mg/kg (Rat)	
2807-30-9		
Cyclohexanone	= 1544 mg/kg (Rat)	
108-94-1		
Diethylene glycol ethyl ether acetate	= 11 g/kg (Rat)	
112-15-2		
Ethylene glycol monobutyl ether acetate	= 2400 mg/kg (Rat)	
112-07-2		
Carbon black	> 15400 mg/kg (Rat)	
1333-86-4		
Ethyl alcohol	= 7060 mg/kg (Rat)	
64-17-5		

Component	Dermal LD50
Ethylene glycol monopropyl ether 2807-30-9	= 870 mg/kg(Rabbit)
Cyclohexanone 108-94-1	= 947 mg/kg(Rabbit)
Diethylene glycol ethyl ether acetate 112-15-2	= 15.1 mL/kg(Rabbit)
Ethylene glycol monobutyl ether acetate 112-07-2	= 1500 mg/kg(Rabbit)

Component	Inhalation LC50
Ethylene glycol monopropyl ether	= 1530 ppm (Rat) 7 h
2807-30-9	
Cyclohexanone	= 8000 ppm (Rat) 4 h
108-94-1	
Ethylene glycol monobutyl ether acetate	> 400 ppm (Rat) 4 h
112-07-2	
Ethyl alcohol	= 124.7 mg/L (Rat) 4 h
64-17-5	

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. 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

damage. (based on components).

Specific test data for the substance or mixture is not available. Irritation 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. 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 STOT - repeated exposure Specific test data for the substance or mixture is not available. Specific test data for the substance or mixture is not available **Chronic Toxicity 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

Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen.		
Component		ACGIH	
Cyclohexanone		A3	
108-94-1			

Ethylene glycol monobutyl ether acetate
A3
112-07-2
Carbon black
A3

Carbon black
1333-86-4

Ethyl alcohol
64-17-5

A3

A3

 Component
 IARC

 Carbon black
 Group 2B

 1333-86-4
 Group 1

 Ethyl alcohol
 Group 1

Component	OSHA
Carbon black 1333-86-4	Х
Ethyl alcohol 64-17-5	Х

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) 6,370.00 mg/kg **ATEmix (dermal)** 2,063.00 mg/kg mg/l

ATEmix (inhalation-dust/mist) 5.50 mg/l ATEmix (inhalation-vapor) 40.00 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

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

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

Component	Algae/aquatic plants
Ethylene glycol monobutyl ether acetate	72h EC50 Desmodesmus subspicatus: > 500 mg/L
112-07-2	

Component	Fish
Cyclohexanone	96h LC50 Pimephales promelas: 481 - 578 mg/L (flow-through)
108-94-1	96h LC50 Pimephales promelas: = 8.9 mg/L
Ethyl alcohol	96h LC50 Oncorhynchus mykiss: 12.0 - 16.0 mL/L (static)
64-17-5	96h LC50 Pimephales promelas: 13400 - 15100 mg/L
	(flow-through)
	96h LC50 Pimephales promelas: > 100 mg/L (static)

Component	Crustacea
Ethylene glycol monobutyl ether acetate	48h EC50 Daphnia magna: = 37 mg/L
112-07-2	
Ethyl alcohol	48h LC50 Daphnia magna: 9268 - 14221 mg/L
64-17-5	48h EC50 Daphnia magna: = 2 mg/L Static

Persistence and Degradability

No information available.

Bioaccumulation

No information available

Component	Partition coefficient
	0.86

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108-94-1		
Ethylene glycol monobutyl ether acetate	1.51	
112-07-2		
Ethyl alcohol	-0.32	
64-17-5		

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 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].

UN/ID no. UN1210
Proper Shipping Name Printing Ink

Hazard Class 3
Packing Group

ICAO / IATA / IMDG / IMO

UN/ID no. UN1210
Proper Shipping Name UN1210
Printing Ink

Hazard Class 3
Packing Group 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.

Component	CAS-No	Weight %	SARA 313 - Threshold Values
Ethylene glycol monopropyl ether	2807-30-9	10 - 30	1.0
Diethylene glycol ethyl ether acetate	112-15-2	1 - 5	1.0
Ethylene glycol monobutyl ether acetate	112-07-2	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

Component	CAS-No	Weight %
Ethylene glycol monopropyl ether	2807-30-9	10 - 30
Diethylene glycol ethyl ether acetate	112-15-2	1 - 5
Ethylene glycol monobutyl ether acetate	112-07-2	1 - 5

U.S. State Regulations

· •	Massachusetts Right To Know
Cyclohexanone 108-94-1	X
Carbon black 1333-86-4	X
Ethyl alcohol 64-17-5	X

Component	Minnesota
	Right To Know
Cyclohexanone	X
108-94-1	
Carbon black	X
1333-86-4	
Ethyl alcohol	Х
64-17-5	

	New Jersey Right To Know
Ethylene glycol monopropyl ether 2807-30-9	X
Cyclohexanone 108-94-1	X
Diethylene glycol ethyl ether acetate 112-15-2	X
Ethylene glycol monobutyl ether acetate 112-07-2	X
Carbon black 1333-86-4	X
Ethyl alcohol 64-17-5	X

Component	Pennsylvania Right To Know		
Ethylene glycol monopropyl ether	X		
2807-30-9 Cyclohexanone	l _X		
108-94-1			
Diethylene glycol ethyl ether acetate	X		
112-15-2			
Ethylene glycol monobutyl ether acetate	X		
112-07-2			
Carbon black	X		
1333-86-4			
Ethyl alcohol	X		
64-17-5			

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

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Component	California Prop. 65		
Carbon black	Carcinogen		
Ethyl alcohol	Carcinogen		
	Developmental		

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- 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
Ethylene glycol monopropyl ether	Part 5, Other Groups and Mixtures; Part 4 Substance
2807-30-9	
Cyclohexanone	Part 4 Substance
108-94-1	
Diethylene glycol ethyl ether acetate	Part 5, Other Groups and Mixtures; Part 4 Substance
112-15-2	
Ethylene glycol monobutyl ether acetate	Part 5, Other Groups and Mixtures; Part 4 Substance
112-07-2	
Ethyl alcohol	Part 5, Individual Substances; Part 4 Substance
64-17-5	

16. OTHER INFORMATION						
HMIS:	Health 2 *	Flammability	Reactivity 0	Personal Protection 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

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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