

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	3459
Product name	Tinting Black
Product category	Ink Product

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)
Skin sensitization	Category 1B - (H317)
Specific target organ toxicity (repeated exposure)	Category 1 - (H372)
Chronic aquatic toxicity	Category 3 - (H412)

Label elements



Signal Word Danger

Hazard Statements

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H372 - Causes damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

EUH208 - May produce an allergic reaction

- P280 Wear eye protection/ face protection
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P273 Avoid release to the environment

Hazards not otherwise classified (HNOC)

May be harmful if swallowed. May be harmful in contact with skin. Harmful to aquatic life.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Component	CAS-No	Weight %	Trade Secret	Note
Vinyl Functional Monomer	Trade Secret	10 - 30	*	
Glycol Ether Acrylate	Trade Secret	10 - 30	*	
Acrylated Oligomer	Trade Secret	10 - 30	*	
Glycol Ether Acrylate	Trade Secret	5 - 10	*	
Glycol Ether Acrylate	Trade Secret	5 - 10	*	
Acrylated Monomer	Trade Secret	5 - 10	*	
Acrylated Monomer	Trade Secret	5 - 10	*	
Photoinitiator	Trade Secret	1 - 5	*	
Carbon black	1333-86-4	1 - 5	*	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 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. Hazardous

polymerization may take place during a fire due to heat. Closed containers could violently rupture.

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

StorageKeep at temperatures between 18°-32°C (65°-90°F). 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. Protect from direct sunlight. Keep away from open flames, hot surfaces
and sources of ignition.

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 1333-86-4	TWA: 3 mg/m ³ (inhalable fraction)
Component	OSHA PEL
Carbon black 1333-86-4	TWA: 3.5 mg/m ³

Component	Ontario TWAEV
Carbon black	TWA: 3.5 mg/m ³
1333-86-4	
Component	Mexico OEL (TWA)
Carbon black	TWA/LMPE-PPT: 3.5 mg/m ³
1333-86-4	STEL/LMPE-CT: 7 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.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Odor	Liquid Mild Sweet Acrylic	Appearance Odor Threshold	Colored Liquid No information available
<u>Property</u> pH Melting point/freezing point	<u>Values</u>	Remarks • Method No data available No data available	-
Boiling point/Boiling Range Flash Point	> 149 °C / 300 °F > 94 °C / > 201 °F	Pensky Martens Clos	ed Cup (PMCC)
Evaporation rate Flammability Limit in Air		No data available No data available	
Upper flammability limit Lower flammability limit Vapor Pressure		No data available No data available No data available	
Vapor Density Specific Gravity	1.1	No data available	
Water Solubility Solubility in other solvents Partition coefficient: n-octanol	hustor	No data available No data available No data available	
Autoignition Temperature Decomposition temperature	water	No data available No data available No data available	
Kinematic viscosity Dynamic viscosity		No data available No data available	
Explosive Properties Oxidizing Properties	No data available No data available		
Other Information			
Photochemically Reactive Weight Per Gallon (Ibs/gal)	No 9.2		
VOC by weight % (less water) 0-1	VOC by volume % (less water) 0-1	VOC lbs/gal (less water) 0-1	VOC grams/liter (less water) 0-1

10. STABILITY AND REACTIVITY

Reactivity

No information available.

Chemical stability

Stable under normal conditions.

Possibility of Hazardous Reactions

None under normal processing. Do not store for longer periods at temperatures above 93°C (200°F).

Conditions to avoid

Temperatures above 93 °C / 200 °F. Protect from direct sunlight. 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
Glycol Ether Acrylate	4660 μL/kg (Rat)
Acrylated Monomer	4890 mg/kg (Rat)
Carbon black 1333-86-4	>15400 mg/kg (Rat)

Component	LD50 Dermal
Glycol Ether Acrylate	2540 µL/kg (Rabbit)
Acrylated Monomer	>5 g/kg (Rabbit)
Carbon black 1333-86-4	>3 g/kg (Rabbit)

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 Carcinogenicity	There is no data for this product. The table below indicates whether each agency has listed any ingredient as a carcinogen.	
Component	ACGIH	
Carbon black 1333-86-4	A3	
Component	IARC	
Carbon black 1333-86-4	Group 2B	

Component	OSHA
Carbon black	Х
1333-86-4	

Numerical measures of toxicity - Product Information

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

ATEmix (oral)	2,350.00 mg/kg	
ATEmix (dermal)	4,713.00 mg/kg mg/l	

12. ECOLOGICAL INFORMATION

Ecotoxicity None known

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

Component	Crustacea
Carbon black	24h EC50 Daphnia magna: >5600 mg/L
1333-86-4	

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

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

<u>SARA 313</u>

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
Glycol Ether Acrylate	Trade Secret	10 - 30	1.0
Glycol Ether Acrylate	Trade Secret	5 - 10	1.0
Glycol Ether Acrylate	Trade Secret	5 - 10	1.0

The above glycol ether acrylate is considered a reactive chemical in ultraviolet curable inks. Once initiated by a high dose of ultraviolet light, this glycol ether acrylate rapidly polymerizes (i.e. hardens) and becomes part of the ink film. The polymerization process of UV curable inks is measured in milliseconds.

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 %
Glycol Ether Acrylate	Trade Secret	10 - 30
Glycol Ether Acrylate	Trade Secret	5 - 10
Glycol Ether Acrylate	Trade Secret	5 - 10

U.S. State Regulations

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

Component	Minnesota Right To Know
Carbon black	Х
1333-86-4	

Component	New Jersey Right To Know
Glycol Ether Acrylate	×
Glycol Ether Acrylate	X
Carbon black 1333-86-4	x

Component	Pennsylvania Right To Know
Glycol Ether Acrylate	X
Glycol Ether Acrylate	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

No information available

	16. OTHER INFORMATION				
Health 2	Flammability 1	Reactivity 1	Personal Protection X		
Key or legend to abbreviations and acronyms used in the safety data sheet					
TWA (time STEL (Sho	-weighted average) ort Term Exposure Limit)				
esearch on Cancer Humans Humans an Carcinogen	r)				
	2 ons and acrony RE CONTROLS/P TWA (time STEL (Sho Maximum) Governmental Ind esearch on Cancer b Humans Humans humans humans	2 1 ons and acronyms used in the safety da RE CONTROLS/PERSONAL PROTECTION TWA (time-weighted average) STEL (Short Term Exposure Limit) Maximum limit value Governmental Industrial Hygienists) esearch on Cancer) Humans Humans	2 1 1 1 ons and acronyms used in the safety data sheet RE CONTROLS/PERSONAL PROTECTION TWA (time-weighted average) STEL (Short Term Exposure Limit) Maximum limit value Governmental Industrial Hygienists esearch on Cancer) P Humans Humans Humans		

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