

SAFETY DATA SHEET

Published Date Aug-21-2024 Revision date Aug-21-2024 Revision Number 2.8

1. IDENTIFICATION

<u>Product identifier</u> Product Code(s) Product name Product category	ADE369 Green ADE Series SV Epoxy Screen Ink				
Other means of identification Synonyms	None				
Recommended use of the chemic	Recommended use of the chemical and restrictions on use				
Recommended use Industrial Printing Operations					
Details of the supplier of the safe	tv data sheet				
UNITED STATES	UNITED KINGDOM				
Nazdar Company	Nazdar Limited				
8501 Hedge Lane Terrace	Barton Road				
Shawnee, KS 66227	Heaton Mersey				
Tel: +001-913-422-1888	Stockport, England SK4 3EG				
Tel: +001-800-677-4657	Tel: +44 161 442 2111				

Emergency telephone number

Tel: +001-800-677-4657 Fax: +001-913-422-2294 www.nazdar.com

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 2 - (H319)
Skin sensitization	Category 1 - (H317)
Reproductive toxicity	Category 2 - (H361)
Flammable liquids	Category 3 - (H226)

Label elements



Warning

Hazard statements

H226 - Flammable liquid and vapor

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H361 - Suspected of damaging fertility or the unborn child

Precautionary Statements

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

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

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

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

Hazards not otherwise classified (HNOC)

Causes mild skin irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%	Trade secret	Note
Resin	Not Available	30 - 60	*	
Dipropylene glycol monomethyl ether	34590-94-8	10 - 30	*	
Diacetone alcohol	123-42-2	5 - 10	*	
Copper Phthalocyanine Compound	Not Available	5 - 10	*	
Propylene glycol monomethyl ether	107-98-2	5 - 10	*	
2-Butoxyethanol	111-76-2	1 - 5	*	
Additive	Not Available	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 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.

Special Provisions

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

StorageKeep 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

Chemical name	ACGIH TLV
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 50 ppm
Diacetone alcohol 123-42-2	TWA: 50 ppm
Copper Phthalocyanine Compound	TWA: 1 mg/m ³ Cu dust and mist
Propylene glycol monomethyl ether 107-98-2	TWA: 50 ppm STEL: 100 ppm
2-Butoxyethanol 111-76-2	TWA: 20 ppm
Chemical name	OSHA PEL
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 100 ppm TWA: 600 mg/m³ Skin
Diacetone alcohol 123-42-2	TWA: 50 ppm TWA: 240 mg/m³
2-Butoxyethanol	TWA: 50 ppm

111-76-2	TWA: 240 mg/m³ Skin	
Chemical name	OSHA PEL (vacated)	
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 100 ppm TWA: 600 mg/m ³ STEL: 150 ppm STEL: 900 mg/m ³ Skin	
Diacetone alcohol 123-42-2	TWA: 50 ppm TWA: 240 mg/m ³	
Propylene glycol monomethyl ether 107-98-2	TWA: 100 ppm TWA: 360 mg/m ³ STEL: 150 ppm	

	STEL: 150 ppm STEL: 540 mg/m ³
2-Butoxyethanol	TWA: 25 ppm
111-76-2	TWA: 120 mg/m ³
	Skin

Chemical name	Ontario TWAEV
Dipropylene glycol monomethyl ether 34590-94-8	TWA: 100 ppm STEL: 150 ppm Skin
Diacetone alcohol 123-42-2	TWA: 50 ppm
Propylene glycol monomethyl ether 107-98-2	TWA: 50 ppm STEL: 100 ppm
2-Butoxyethanol 111-76-2	TWA: 20 ppm

Chemical name	Mexico OEL (TWA)	
Dipropylene glycol monomethyl ether	TWA/VLE-PPT: 100 ppm	
34590-94-8	STEL/PPT-CT: 150 ppm	
Diacetone alcohol	TWA/VLE-PPT: 50 ppm	
123-42-2		
Propylene glycol monomethyl ether	TWA/VLE-PPT: 100 ppm	
107-98-2	STEL/PPT-CT: 150 ppm	
2-Butoxyethanol	TWA/VLE-PPT: 20 ppm	
111-76-2		

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.
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

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 an Physical state	i d chemical properties Liquid	Appearance	Colored
Odor	Characteristic	Odor threshold	No information available
Property_	<u>Values</u>	Remarks • Method	
рН		No data available	
Melting point / freezing point Initial boiling point and boiling ra	No information available	No data available	
Flash point	52 °C / 125 °F	Setaflash closed cup	
Evaporation rate	52 C / 125 F	No data available	
Flammability Limit in Air		NO Uala available	
Upper flammability or explosiv	/e	No data available	
limits			
Lower flammability or explosiv limits	/e	No data available	
Vapor pressure		No data available	
Relative vapor density		No data available	
Specific gravity - VALUE 1	1.11		
Water Solubility		No data available	
Solubility in other solvents		No data available	
Partition coefficient		No data available	
Autoignition temperature	No information available	No data available	
Hyphen		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			
Photochemically Reactive	No		
Weight Per Gallon (lbs/gal)	9.25		
VOC by weight %	VOC by volume %	VOC lbs/gal	VOC grams/liter
(less water)	(less water)	(less water)	(less water)
36.35	37.67	3.36	403.22

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

Inhalation	Specific test data for the substance or mixture is not available.
Eye Contact	Specific test data for the substance or mixture is not available.
Skin Contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Chemical name	Oral LD50
Dipropylene glycol monomethyl ether 34590-94-8	= 5.35 g/kg (Rat)
Diacetone alcohol 123-42-2	> 4 g/kg (Rat)
Copper Phthalocyanine Compound	> 5000 mg/kg (Rat)
Propylene glycol monomethyl ether 107-98-2	= 5000 mg/kg (Rat)
2-Butoxyethanol 111-76-2	= 470 mg/kg (Rat)
Additive	> 3200 mg/kg (Rat)

Chemical name	Dermal LD50
Dipropylene glycol monomethyl ether 34590-94-8	= 9500 mg/kg (Rabbit)
Diacetone alcohol 123-42-2	= 13630 mg/kg (Rabbit)
Propylene glycol monomethyl ether 107-98-2	= 13 g/kg (Rabbit)
2-Butoxyethanol 111-76-2	= 435 mg/kg (Rabbit)
Additive	> 2000 mg/kg (Rabbit)

Chemical name	Inhalation LC50	
Diacetone alcohol	> 7.23 g/m³ (Rat)8 h	
123-42-2		
Propylene glycol monomethyl ether	> 7559 ppm (Rat)6 h	
107-98-2		
2-Butoxyethanol	= 450 ppm (Rat)4 h	
111-76-2	= 486 ppm (Rat) 4 h	
Additive	> 5.3 mg/L (Rat)6 h	

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 a	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 irritation. (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. May cause an allergic skin reaction. (based on components).		
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. Suspected of damaging fertility or the unborn child. (based on components).		
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.		
Chemical name	ACGIH		
2-Butoxyethanol 111-76-2	A3		

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)	18,431.40 mg/kg
ATEmix (dermal)	99,999.00 mg/kg
ATEmix (inhalation-gas)	99,999.00
ATEmix (inhalation-dust/mist)	19.60 mg/l
ATEmix (inhalation-vapor)	117.60 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

Chemical name	Fish
Dipropylene glycol monomethyl ether	96h LC50 Pimephales promelas: > 10000 mg/L (static)
34590-94-8	
Diacetone alcohol	96h LC50 Lepomis macrochirus: = 420 mg/L (static)
123-42-2	96h LC50 Lepomis macrochirus: = 420 mg/L
Copper Phthalocyanine Compound	96h LC50 Lepomis macrochirus: = 752.4 mg/L (static)
Propylene glycol monomethyl ether 107-98-2	96h LC50 Pimephales promelas: = 20.8 g/L (static)
2-Butoxyethanol	96h LC50 Lepomis macrochirus: = 1490 mg/L (static)
111-76-2	96h LC50 Lepomis macrochirus: = 2950 mg/L
Additive	96h LC50 Pimephales promelas: > 1.55 mg/L (static)

Chemical name	Crustacea
Dipropylene glycol monomethyl ether 34590-94-8	48h LC50 Daphnia magna: = 1919 mg/L
Propylene glycol monomethyl ether 107-98-2	48h EC50 Daphnia magna: = 23300 mg/L
2-Butoxyethanol 111-76-2	48h EC50 Daphnia magna: > 1000 mg/L
Additive	48h EC50 Daphnia magna: > 1.46 mg/L

Persistence and degradability No information available.

Bioaccumulation

Chemical name	Partition coefficient
	-0.064
34590-94-8	
Diacetone alcohol	1.03
123-42-2	
	-0.437
107-98-2	
	0.81
111-76-2	

13. DISPOSAL CONSIDERATIONS

Disposal 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 UN number or ID number Proper shipping name Transport hazard class(es) Packing group	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]. UN1210 Printing Ink 3 III	
ICAO / IATA / IMDG / IMO UN number or ID number UN proper shipping name Transport hazard class(es) Packing group	UN1210 Printing Ink 3 III	

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).

US 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. Chemical name CAS No. Weight-% SARA 313 - Threshold

Chemical name	CAS No.	Weight-%	SARA 313 - Threshold Values %
2-Butoxyethanol	111-76-2	1 - 5	1.0

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

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

US State Regulations

Chemical name	Massachusetts
Dipropylene glycol monomethyl ether	X
34590-94-8	
Diacetone alcohol	X
123-42-2	
Propylene glycol monomethyl ether	X
107-98-2	
2-Butoxyethanol	X
111-76-2	

Chemical name	Minnesota Right To Know
Dipropylene glycol monomethyl ether 34590-94-8	×
Diacetone alcohol 123-42-2	X
Propylene glycol monomethyl ether 107-98-2	x
2-Butoxyethanol 111-76-2	X

Chemical name	New Jersey
Dipropylene glycol monomethyl ether	X
34590-94-8 Diacetone alcohol	Y
123-42-2	<u>^</u>
Copper Phthalocyanine Compound	X
Propylene glycol monomethyl ether 107-98-2	X
2-Butoxyethanol 111-76-2	X

Chemical name	Pennsylvania
Dipropylene glycol monomethyl ether	X
34590-94-8	
Diacetone alcohol	X
123-42-2	
Copper Phthalocyanine Compound	X

STEL (Short Term Exposure Limit)

Skin designation

Propylene glycol monomethyl ether	X
107-98-2	
2-Butoxyethanol	X
111-76-2	

California Proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects

<u>Canada</u>

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
Diacetone alcohol 123-42-2	Part 4 Substance - Criteria Air Contaminants
Copper Phthalocyanine Compound	Part 1, Group A Substance
Propylene glycol monomethyl ether	Part 5 Substance - Volatile Organic Compounds with Additional
107-98-2	Reporting Requirements
	Part 4 Substance - Criteria Air Contaminants
2-Butoxyethanol	Part 1, Group A Substance
111-76-2	Part 5 Substance - Volatile Organic Compounds with Additional
	Reporting Requirements
	Part 4 Substance - Criteria Air Contaminants

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
Ceiling	Maximum limit value	Sk*
+	Sensitizers	

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 Aug-21-2024

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