

SAFETY DATA SHEET

Print Date Revision Date Revision Number Jun-01-2015 May-31-2015

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

Product identifier

Product code VF184

Product name Screen Wash **Product category Ink Product**

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 KINGDOM **UNITED STATES** Nazdar Limited Nazdar Company 8501 Hedge Lane Terrace Barton Road Shawnee, KS 66227 **Heaton Mersey**

Stockport, England SK4 3EG Tel: 1-913-422-1888 Tel: +44 161 442 2111 Tel: 1-800-677-4657

Fax: 1-913-422-2294 www.nazdar.com

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

Acute toxicity - Dermal	Category 4 - (H312)
Acute toxicity - Inhalation (Vapors)	Category 4 - (H332)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin Corrosion/irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 2 - (H319)
Specific target organ toxicity (single exposure)	Category 3 - (H336)
Flammable liquids	Category 2 - (H225)

Label elements





Signal Word Danger

Hazard Statements

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H312 - Harmful in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H336 - May cause drowsiness or dizziness

H225 - Highly flammable liquid and vapor

Precautionary Statements

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Hazards not otherwise classified (HNOC)

May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Ingestion

Component	CAS-No	Weight %	Trade Secret	Note
Xylenes (o-, m-, p- isomers)	1330-20-7	30 - 60	*	
Acetone	67-64-1	30 - 60	*	
Ethyl benzene (constituent)	100-41-4	10 - 30	*	1

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

Note 1. Type of chemical: Constituent

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.

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
Xylenes (o-, m-, p- isomers)	TWA: 100 ppm
1330-20-7	STEL: 150 ppm
Acetone	TWA: 500 ppm
67-64-1	STEL: 750 ppm
Ethyl benzene (constituent)	TWA: 20 ppm
100-41-4	

Component	OSHA PEL
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 100 ppm
1550-20-7	TWA: 435 mg/m³ STEL: 150 ppm
	STEL: 655 mg/m ³
Acetone	TWA: 750 ppm
67-64-1	TWA: 1800 mg/m ³
	STEL: 2400 mg/m ³
	STEL: 1000 ppm
	TWA: 1000 ppm
	TWA: 2400 mg/m ³
Ethyl benzene (constituent)	TWA: 100 ppm
100-41-4	TWA: 435 mg/m ³
	STEL: 125 ppm

STEL: 545 mg/m ³

Component	Ontario TWAEV
Xylenes (o-, m-, p- isomers) 1330-20-7	TWA: 100 ppm STEL: 150 ppm
Acetone	TWA: 500 ppm
67-64-1	STEL: 750 ppm
Ethyl benzene (constituent) 100-41-4	TWA: 100 ppm STEL: 125 ppm

Component	Mexico OEL (TWA)
Xylenes (o-, m-, p- isomers)	TWA/LMPE-PPT: 100 ppm
1330-20-7	TWA/LMPE-PPT: 435 mg/m ³
	STEL/LMPE-CT: 150 ppm
	STEL/LMPE-CT: 655 mg/m ³
Acetone	TWA/LMPE-PPT: 1000 ppm
67-64-1	TWA/LMPE-PPT: 2400 mg/m ³
	STEL/LMPE-CT: 1260 ppm
	STEL/LMPE-CT: 3000 mg/m ³
Ethyl benzene (constituent)	TWA/LMPE-PPT: 100 ppm
100-41-4	TWA/LMPE-PPT: 435 mg/m ³
	STEL/LMPE-CT: 125 ppm
	STEL/LMPE-CT: 545 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.

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 Liquid Appearance Water-white

Odor Characteristic Odor Threshold No information available

Property
DH

Values
Remarks • Method
No data available

Melting point/freezing point No data available

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

Flash Point -20 °C / -4 °F Closed cup (Minimum)

Evaporation rate No data available Flammability Limit in Air

Upper flammability limit

No data available

Lower flammability limitNo data availableVapor PressureNo data availableVapor DensityNo data available

Specific Gravity 0.83

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 Yes Weight Per Gallon (lbs/gal) 6.9

VOC by weight %	VOC by volume %	VOC lbs/gal	VOC grams/liter
(less water)	(less water)	(less water)	(less water)
100	100	6.92	829.09

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

InhalationThere is no data for this product.Eye ContactThere is no data for this product.Skin ContactThere is no data for this product.IngestionThere is no data for this product.

Component	Oral LD50
Xylenes (o-, m-, p- isomers) 1330-20-7	4300 mg/kg (Rat)
Acetone 67-64-1	5800 mg/kg (Rat)
Ethyl benzene (constituent) 100-41-4	3500 mg/kg (Rat)

Component	LD50 Dermal
Xylenes (o-, m-, p- isomers)	>1700 mg/kg (Rabbit)

1330-20-7	
Ethyl benzene (constituent)	15354 mg/kg (Rabbit)
100-41-4	

Component	Inhalation LC50
Xylenes (o-, m-, p- isomers) 1330-20-7	5000 ppm (Rat)4 h 47635 mg/L (Rat)4 h
Ethyl benzene (constituent)	17.2 mg/L (Rat) 4 h
100-41-4	

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/irritationThere is no data for this product.Eye damage/irritationThere is no data for this product.IrritationThere is no data for this product.CorrosivityThere is no data for this product.

Sensitisation May cause sensitization of susceptible persons.

Mutagenic EffectsThere is no data for this product.Reproductive EffectsThere is no data for this product.STOT - single exposureThere is no data for this product.STOT - repeated exposureThere is no data for this product.Chronic ToxicityThere is no data for this product.Aspiration hazardThere is no data for this product.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

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Component	ACGIH
Ethyl benzene (constituent)	A3
100-41-4	

Component	IARC
Ethyl benzene (constituent)	Group 2B
100-41-4	·

Component	OSHA
Ethyl benzene (constituent)	X
100-41-4	

Numerical measures of toxicity - Product Information

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

ATEmix (oral) 4,905.00 mg/kg
ATEmix (dermal) 3,252.00 mg/kg
ATEmix (inhalation-dust/mist) 2.90 mg/l
ATEmix (inhalation-vapor) 21.00 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

None known

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

Component	Algae/aquatic plants
Ethyl benzene (constituent)	96h EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static]
100-41-4	72h EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L
	[static]
	72h EC50 Pseudokirchneriella subcapitata: 4.6 mg/L
	96h EC50 Pseudokirchneriella subcapitata: >438 mg/L

Component	Fish
Acetone	96h LC50 Oncorhynchus mykiss: 4.74 - 6.33 mL/L 96h LC50
67-64-1	Pimephales promelas: 6210 - 8120 mg/L [static]
	96h LC50 Lepomis macrochirus: 8300 mg/L
Ethyl benzene (constituent)	96h LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]
100-41-4	96h LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]
	96h LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]
	96h LC50 Lepomis macrochirus: 32 mg/L [static]
	96h LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]
	96h LC50 Poecilia reticulata: 9.6 mg/L [static]

Component	Crustacea
Acetone	48h EC50 Daphnia magna: 10294 - 17704 mg/L [static]
67-64-1	48h EC50 Daphnia magna: 12600 - 12700 mg/L
Ethyl benzene (constituent)	48h EC50 Daphnia magna: 1.8 - 2.4 mg/L
100-41-4	

Persistence and Degradability

No information available.

Bioaccumulation

No information available.

Component	Partition coefficient
Xylenes (o-, m-, p- isomers)	2.96
1330-20-7	
Acetone	-0.24
67-64-1	
Ethyl benzene (constituent)	3.118
100-41-4	

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

UN/ID no. UN1210

Proper Shipping Name Printing Ink Related Material

Hazard Class 3
Packing Group

ICAO / IATA / IMDG / IMO

UN/ID no. UN1210

Proper Shipping Name Printing Ink Related Material

Hazard Class 3 Packing Group II

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
Xylenes (o-, m-, p- isomers)	1330-20-7	30 - 60	1.0
Ethyl benzene (constituent)	100-41-4	10 - 30	0.1

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 %
Xylenes (o-, m-, p- isomers)	1330-20-7	30 - 60
Ethyl benzene (constituent)	100-41-4	10 - 30

U.S. State Regulations

Component	Massachusetts Right To Know
Xylenes (o-, m-, p- isomers) 1330-20-7	X
Acetone 67-64-1	X
Ethyl benzene (constituent) 100-41-4	X

Component	Minnesota Right To Know
Xylenes (o-, m-, p- isomers) 1330-20-7	X
Acetone 67-64-1	X
Ethyl benzene (constituent) 100-41-4	X

Component	New Jersey Right To Know
Xylenes (o-, m-, p- isomers) 1330-20-7	X
Acetone 67-64-1	X
Ethyl benzene (constituent) 100-41-4	X

Component	Pennsylvania Right To Know
Xylenes (o-, m-, p- isomers) 1330-20-7	X
Acetone 67-64-1	X
Ethyl benzene (constituent) 100-41-4	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

10 Productive rights				
Component	California Prop. 65			
Ethyl benzene (constituent)	Carcinogen			
Toluene	Developmental			
	Female Reproductive			

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Canada

Component	NPRI - National Pollutant Release Inventory
Xylenes (o-, m-, p- isomers) 1330-20-7	Part 1, Group A Substance total of all isomers of Xylene, including m-Xylene, CAS No. 108-38-3, o-Xylene, CAS No. 95-47-6, and p-Xylene, CAS No. 106-42-3 Part 5, Isomer Groups total of all isomers of Xylene, including m-Xylene, CAS No. 108-38-3, o-Xylene, CAS No. 95-47-6, and p-Xylene, CAS No. 106-42-3 Part 4 Substance as set out in
	Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999
Acetone 67-64-1	Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999
Ethyl benzene (constituent) 100-41-4	Part 1, Group A Substance Part 4 Substance as set out in Section 65 of the List of Toxic Substances in Schedule 1 of the Canadian Environmental Protection Act, 1999

16. OTHER INFORMATION					
1410				_	
	1114-				

HMIS:HealthFlammabilityReactivityPersonal Protection2 *30X

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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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