

# **SAFETY DATA SHEET**

Published Date Jan-07-2020 Revision Date Jan-07-2020 Revision Number 2.5

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

Product identifier Product code Product name

**Product category** 

NSC42F Nitrogen Texture Clear Fine Nitrogen Texture Clear UV Screen Ink

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: +001-913-422-1888 Tel: +001-800-677-4657 Fax: +001-913-422-2294 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: +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 2 - (H319)
Skin sensitization	Category 1B - (H317)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Chronic aquatic toxicity	Category 3 - (H412)

#### Label elements



Signal Word Warning

#### Hazard Statements

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H373 - May cause damage to organs through prolonged or repeated exposure

H412 - Harmful to aquatic life with long lasting effects

#### **Precautionary Statements**

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

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

P337 + P313 - If eye irritation persists: Get medical advice/attention

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

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention

P314 - Get medical advice/attention if you feel unwell

P273 - Avoid release to the environment

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

#### Hazards not otherwise classified (HNOC)

No information available.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Mixture

Component	CAS-No	Weight %	Trade Secret	Note
Acrylated Monomer	Trade Secret	30 - 60	*	
Acrylated Oligomer	Trade Secret	10 - 30	*	
Photoinitiator	Trade Secret	5 - 10	*	
Vinyl Functional Monomer	Trade Secret	1 - 5	*	
Acrylated Monomer	Trade Secret	1 - 5	*	
Acrylated Monomer	Trade Secret	1 - 5	*	
Additive	Trade Secret	1 - 5	*	
Additive	Trade Secret	1 - 5	*	
Acrylated Monomer	Trade Secret	< 0.5	*	
Ethyl benzene (constituent)	100-41-4	< 0.5	*	1
Acrylated Monomer	Trade Secret	< 0.5	*	

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

Note 1. Hazardous Constituent contained in Complex Substance(s) required for disclosure

## 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 eves, 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 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	
Ethyl benzene (constituent)	TWA: 20 ppm	
100-41-4		
Component	OSHA PEL	
Ethyl benzene (constituent)	TWA: 100 ppm	

Component	OSHA PEL (vacated)	
Ethyl benzene (constituent)	TWA: 100 ppm	
100-41-4	TWA: 435 mg/m <sup>3</sup>	
100 - 11 -	STEL: 125 ppm	
	STEL: 545 mg/m <sup>3</sup>	
	51 LL. 545 mg/m²	
Component	Ontario TWAEV	
Ethyl benzene (constituent)	TWA: 20 ppm	
100-41-4		
Component	Mexico OEL (TWA)	
Ethyl benzene (constituent)	TWA/VLE-PPT: 100 ppm	
100-41-4	TWA/VLE-PPT: 435 mg/m <sup>3</sup>	
	STEL/PPT-CT: 125 ppm	
	STEL/PPT-CT: 545 mg/m <sup>3</sup>	
Appropriate engineering contro	ls	
Engineering Measures	Provide a good standard of general ventilation. Natural ventilation is from doors, windows	
Lingineering measures	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 Considerat	ions 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	
Odor	Sweet Mild Acrylic	Odor Threshold	
<u>Property</u> pH	Values	Remarks • Method No data available	

Colored Liquid No information available

Page 4/10

Melting Point / Freezing Point Boiling Point / Boiling Range Flash Point Evaporation rate Flammability Limit in Air	> 149 °C / 300 °F > 94 °C / > 201 °F	No data available Pensky Martens Close No data available	ed Cup (PMCC)
Upper flammability limit Lower flammability limit Vapor Pressure		No data available No data available No data available	
Vapor Pressure Vapor Density Specific Gravity	1.08	No data available	
Water Solubility Solubility in other solvents		No data available No data available	
Partition coefficient: n-octanol Autoignition Temperature Decomposition temperature	/water	No data available No data available No data available	
Kinematic viscosity		No data available No data available No data available	
Explosive Properties Oxidizing Properties	No data available No data available		
Other Information			
Photochemically Reactive Weight Per Gallon (lbs/gal)	No 9.03		
VOC by weight % (less water) 1.58	VOC by volume % (less water) No information available	VOC lbs/gal (less water) 0-1	VOC grams/liter (less water) 17.04

## **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	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.

Component	Oral LD50
Acrylated Monomer	= 5 g/kg (Rat)

Component	Dermal LD50	
Acrylated Monomer	= 548 mg/kg (Rat)	
100-41-4		
Ethyl benzene (constituent)	= 3500 mg/kg (Rat)	
Additive	> 3200 mg/kg (Rat)	
Acrylated Monomer	= 813 mg/kg (Rat)	
Acrylated Monomer	= 6200 mg/kg (Rat)	
Photoinitiator	= 1694 mg/kg (Rat)	

component	Dermai ED50
Acrylated Monomer	= 3600 mg/kg (Rabbit)
Acrylated Monomer	> 2 g/kg (Rabbit)
Ethyl benzene (constituent) 100-41-4	= 15400 mg/kg (Rabbit)
Acrylated Monomer	= 154 mg/kg (Rabbit)
Component	Inhalation LC50
Additive	> 5.3 mg/L(Rat)6 h

Additive	> 5.3 mg/L (Rat)6 h
Ethyl benzene (constituent)	= 17.4 mg/L (Rat) 4 h
100-41-4	

## 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. 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 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.		
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. May cause damage to		
	organs through prolonged or repeated exposure. (based on components).		
Chronic Toxicity	Specific test data for the substance or mixture is not available		
Target Organ Effects	Liver, Respiratory system.		
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		
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

**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) 5,871.00 mg/kg

ATEmix (dermal)

5,871.00 mg/kg 20,807.00 mg/kg mg/l

## **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
Acrylated Monomer	72h EC50 Desmodesmus subspicatus: > 28 mg/L
Ethyl benzene (constituent)	96h EC50 Pseudokirchneriella subcapitata: > 438 mg/L
100-41-4	96h EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L static
	72h EC50 Pseudokirchneriella subcapitata: = 4.6 mg/L
	72h EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L static

Component	Fish
Vinyl Functional Monomer	96h LC50 Danio rerio: = 307 mg/L [static]
Additive	96h LC50 Pimephales promelas: > 1.55 mg/L (static)
Acrylated Monomer	96h LC50 Danio rerio: = 5.74 mg/L [static]
Ethyl benzene (constituent) 100-41-4	96h LC50 Pimephales promelas: 7.55 - 11 mg/L (flow-through) 96h LC50 Poecilia reticulata: = 9.6 mg/L (static) 96h LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L (static) 96h LC50 Pimephales promelas: 9.1 - 15.6 mg/L (static) 96h LC50 Oncorhynchus mykiss: = 4.2 mg/L (semi-static) 96h LC50 Lepomis macrochirus: = 32 mg/L (static)
Acrylated Monomer	96h LC50 Pimephales promelas: = 4.8 mg/L (flow-through)

Component	Crustacea
Acrylated Monomer	48h EC50 Daphnia magna: = 88.7 mg/L
Additive	48h EC50 Daphnia magna: > 1.46 mg/L
Ethyl benzene (constituent) 100-41-4	48h EC50 Daphnia magna: 1.8 - 2.4 mg/L
Acrylated Monomer	48h EC50 Daphnia magna: = 0.78 mg/L

#### Persistence and Degradability

No information available.

#### **Bioaccumulation**

No information available

Component	Partition coefficient
Acrylated Monomer	2.77
Ethyl benzene (constituent)	3.2
100-41-4	
Acrylated Monomer	0.21

#### 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 Proper Shipping Name	Not regulated 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

#### <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

		3	Values
Ethyl benzene (constituent)	100-41-4	< 0.5	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	< 0.5
Ethyl benzene (constituent)	100-41-4	< 0.5

## U.S. State Regulations

	Massachusetts Right To Know
Ethyl benzene (constituent) 100-41-4	X
Acrylated Monomer	X

	Minnesota Right To Know
Acrylated Monomer	X
Acrylated Monomer	X
Ethyl benzene (constituent) 100-41-4	X

	New Jersey Right To Know
Ethyl benzene (constituent) 100-41-4	X
Acrylated Monomer	X

	Pennsylvania Right To Know
Ethyl benzene (constituent) 100-41-4	X
Acrylated Monomer	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
Ethyl benzene (constituent)	Carcinogen

## <u>Canada</u>

Component	NPRI - National Pollutant Release Inventory
Ethyl benzene (constituent)	Part 1, Group A Substance; Part 4 Substance
100-41-4	

16. OTHER INFORMATION				
HMIS:	Health	Flammability	Reactivity	Personal Protection
	2	1	1	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 MTP: (National Toxicity Program) Known - Known Carcinogen Reasonably Anticipated to be a Human Carcinogen OSHA: (Occupational Safety & Health Administration)

X - Present

Revision Date

Jan-07-2020

#### 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