Material Name: Styrenated Phenol

NEVASTAIN® 21 Resin



## \* \* \*Section 1 - PRODUCT IDENTIFICATION\* \* \*

## **Material Name:**

Styrenated Phenol

Trade Name:

**NEVASTAIN® 21 Resin** 

## **Recommended Uses of Product and Restrictions**

Identified Uses: Adhesives, coatings, rubber Uses Advised Against: None Known

#### **Manufacturer Information**

Neville Chemical Company 2800 Neville Road Pittsburgh, PA 15225-1496 Phone:412-331-4200

Emergency Phone #: 412-331-4200 or CHEMTREC at 800-424-9300

Fax:412-777-4234

# \* \* \*Section 2 - HAZARD(S) IDENTIFICATION\* \* \*

## Classification in accordance with Schedule 1 of Hazardous Products Regulations (HPR) (SOR/2015-17)

Skin Corrosion/Irritation - Category 2 Skin Sensitization - Category 1A Hazardous to the Aquatic Environment - Chronic - Category 3

## **GHS Label Elements**

#### Symbol(s)



# **Signal Word**

Warning

## **Hazard Statement(s)**

Causes skin irritation.

May cause an allergic skin reaction.

Harmful to aquatic life with long lasting effects.

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#### Precautionary Statement(s)

#### **Prevention**

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Avoid release to the environment

## Response

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

## **Storage**

None needed according to classification criteria

#### **Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations

## Hazard(s) Not Otherwise Classified

Contact with molten (hot) material may cause thermal burns.

# \* \* \*Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS\* \* \*

CAS	Component	Percentage		
61788-44-1	Phenol, styrenated (EC Number 262-975-0)	>99.9%		
108-95-2	Phenol (EC Number 203-632-7)	<0.1%		

## Contaminants:

< 0.1% free unreated phenol remains in the product

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# \* \* \*Section 4 - FIRST-AID MEASURES\* \* \*

#### **Description of Necessary Measures**

#### Inhalation

Supply fresh air. Consult a doctor in case of complaints.

If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

#### **Skin Contact**

Wash skin with soap and water thoroughly while removing contaminated clothing and shoes.

## **Eye Contact**

Flush eyes with plenty of water for at least 15 minutes. Then consult a doctor.

## Ingestion

Get medical attention

## **Most Important Symptoms/Effects**

#### Acute

Mild skin irritation.

## Delayed

No information on significant adverse effects.

#### Indication of Immediate Medical Attention and Special Treatment Needed, If Needed

Provide general supportive measures and treat symptomatically.

## \* \* \*Section 5 - FIRE-FIGHTING MEASURES\* \* \*

#### Suitable Extinguishing Media

Dry chemical, carbon dioxide, foam, water spray

#### **Unsuitable Extinguishing Media**

Do not use high-pressure water streams.

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#### **Special Hazard Arising from the Chemical**

Combustible liquid and vapor. May burn if exposed to surrounding fire When heated above its boiling point, may generate vapors that may ignite in air and a source of ignition. Vapors are heavier than air and can collect in low areas; vapors can travel to an ignition source and flash back

**Combustion:** oxides of carbon, carbon monoxide, hydrocarbons.

#### **Fire Fighting Measures**

Keep away from sources of ignition - No smoking. Avoid inhalation of material or combustion by-products. Move material from fire area if it can be done without risk. Use extinguishing agents appropriate for surrounding fire. Dike for later disposal. Stay upwind and keep out of low areas.

## **Special Protective Equipment and Precautions for Firefighters**

Wear full protective fire fighting gear including self contained breathing apparatus (SCBA) for protection against possible exposure.

## \* \* \*Section 6 - ACCIDENTAL RELEASE MEASURES\* \* \*

#### Personal Precautions, Protective Equipment and Emergency Procedures

Wear appropriate personal protective equipment recommended in Section 8 of the MSDS. Keep unnecessary people away, isolate hazard area and deny entry. Avoid contact with skin and eyes. Avoid release to the environment. Only personnel trained for the hazards of this material should perform clean up and disposal.

## Methods and Materials for Containment and Cleaning Up

Use non-sparking tools and equipment. Keep unnecessary people away, isolate hazard area and deny entry. Absorb with sand or other non-combustible material. Keep out of water supplies, sewers and soil. Collect spilled material in appropriate container for disposal. In case of spillage, stop the flow of material and block any potential routes to water systems

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## \* \* \*Section 7 - HANDLING AND STORAGE\* \* \*

#### **Precautions for Safe Handling**

Keep away from heat, sparks, open flame, hot surfaces & direct sun light. Wear protective gloves and eye/face protection. Keep away from all ignition sources. Avoid contact with skin and eyes. Always wear recommended personal protective clothing and equipment.- See Section 8. Take precautionary measures against static discharge. Dissipate static electricity during transfer by earthing (grounding and bonding) containers and equipment. Do not breathe vapor or mist.

## Conditions for Safe Storage, including any Incompatibilities

Store in a cool, dry place. Store in a well-ventilated area. Avoid contact with molten material. Keep separated from incompatible substances. Keep container tightly closed. Empty containers may contain product residue. Do not reuse empty containers without commercial cleaning or reconditioning. Store and handle in accordance with all current regulations and standards.

#### **Incompatible Materials**

oxidizing materials, combustible materials

# \* \* \*Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION\* \* \*

# **Component Exposure Limits**

Components with limit values that require monitoring at the workplace:				
108-95-2	Phenol			
PEL (USA)	Long-term value: 19 mg/m³, 5 ppm, Skin			
REL (USA)	Short-term value: C60* mg/m³, C 15.6* ppm Long-term value: 19 mg/m³, 5 ppm *15-0min; Skin			
TLV (USA)	Long-term value: 19 mg/m³, 5 oom. Skin: BEI			
Ingredients with biological limit values:				
108-95-2	Phenol			
BEI (USA)	250 mg/g creatinine. Medium: urine / Time: end of shift Parameter: Phenol with hydrolysis (background, nonspecific)			

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#### **Appropriate Engineering Controls**

Provide a local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. It is recommended that all vapor control equipment such as local exhaust ventilation and material transport systems involved in handling of these product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that vapor-handling systems (such as exhaust ducts, vessels, and processing equipment) are designed in a manner to prevent the escape of vapors into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

## Individual Protection Measures, such as Personal Protective Equipment

#### General protective and hygienic measures:

Wash hands before breaks and at the end of work.

#### **Eyes/Face Protection**

Wear splash resistant safety goggles with a face shield.

#### **Skin Protection**

Wear appropriate chemical resistant clothing. Include boots and a protective suit if needed.

#### **Glove Recommendations**

Wear appropriate chemical resistant gloves. Recommended material: rubber, neoprene.

The resistance of the glove material should be checked prior to the application.

#### **Respiratory Protection**

A NIOSH approved respirator with organic vapor cartridges and N95 filters may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure.

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# \* \* \*Section 9 - PHYSICAL AND CHEMICAL PROPERTIES\* \* \*

Physical State:	Semi Viscous Liquid	Vapor Density (air = 1):	Not available
Appearance:	Fluid	Evaporation Rate (water = 1) :	<1
Color:	Light Yellow	pH:	Not available
Odor:	Phenolic Like	Boiling Point:	232°C.
Odor Threshold:	Not available	Boiling Point Range:	Not Available
Softening Point:	Not Applicable	Decomposition Temperature:	Not available
Melting Point:	Not available	Vapor Pressure:	25 Pa at 68°F. 171.22 Pa @ 122°F.
Freezing Point:	Not available	KOC:	Not available
Specific Gravity (water = 1):	1.07 @ 25°C	Log KOW: (n-octanol/water)	DSP: 6.24 TSP: 7.77
Molecular Weight (Mn):	Not available	Water Solubility:	DSP: 665ug/l – TSP: 7.1ug/l
VOC:	Not available	Coeff. Water/Oil Dist:	Not available
Flash Point:	>365 °F	Relative Density:	Not available
OSHA Flammability Class:	Not classified	Viscosity, Brookfield, cps.:	5,000 ± 2,400 25°C.
Minimum Explosive Concentration:	Not available	Taste:	Not available
KSt-value (bar x m/s):	Not available	LEL:	Not available
Auto Ignition Temperature:	Not available	UEL:	Not available

# \* \* \*Section 10 - STABILITY AND REACTIVITY\* \* \*

## Reactivity

None known.

## **Chemical Stability**

Stable at normal temperatures and pressure.

## **Possibility of Hazardous Reactions**

Hazardous polymerization will not occur.

## **Conditions to Avoid**

Avoid heat, flames, sparks and other sources of ignition.

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## **Incompatible Materials**

Oxidizing materials, combustible materials

## **Hazardous decomposition products**

Oxides of carbon, carbon monoxide, hydrocarbons, phenolic type compounds **Combustion:** oxides of carbon, carbon monoxide, hydrocarbons.

## \* \* \*Section 11 - TOXICOLOGICAL INFORMATION\* \* \*

## **Acute and Chronic Toxicity**

## Acute toxicity:

LD/LC50 values that are relevant for classification:						
61788-44-1 Phenol	, styrenated					
Oral	LD50	2,500 mg/kg (rat) (OECD 423)				
108-95-2 phenol						
Oral	LD50	317 mg/kg (rat)				
Dermal	LD50	850 mg/kg (rabbit)				

## Information on Likely Routes of Exposure Inhalation

#### Inhalation:

No information on significant adverse effects.

## Ingestion

No information on significant adverse effects.

## **Skin Contact**

No information on significant adverse effects.

## **Eye Contact**

No information on significant adverse effects.

#### **Immediate Effects**

No information on significant adverse effects.

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## **Delayed Effects**

No information on significant adverse effects.

## **Medical Conditions Aggravated by Exposure**

No data available.

## **Irritation/Corrosivity Data**

No information on significant adverse effects.

# **Respiratory Sensitization**

No data available.

## **Dermal Sensitization**

No data available.

## **Germ Cell Mutagenicity**

No data available.

## Carcinogenicity

**Component Carcinogenicity** 

IARC (International Agency for Research on Cancer)					
108-95-2	phenol	3			
100-42-5	Styrene	2B			
100-41-4	Ethylbenzene	2B			

## **Reproductive Toxicity**

No data available.

## **Specific Target Organ Toxicity - Single Exposure**

No data available.

## **Specific Target Organ Toxicity - Repeated Exposure**

No data available.

## **Aspiration hazard**

No data available.

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# \* \* \*Section 12 - ECOLOGICAL INFORMATION\* \* \*

#### **Ecotoxicity**

Harmful to aquatic life with lasting effects.

## **Component Analysis - Aquatic Toxicity**

Aquatic Toxici	Aquatic Toxicity				
61788-44-1 Phenol, styrenated					
EC50 (48 h)	DSP: >0.249 mg/l (daphnia)				
EC50 (72 h)	DSP: 0.326 mg/l (algae)				

# **Persistence and Degradability**

Not easily biodegradable.

#### Other Information:

21 days-NOEC-Reproduction, Daphnia Magna:

DSP: 115ug/l. TSP: 35ug/l: Absense of long term effect at the limit of water solubility

72h-NOEC-Algae:

DSP: 140ug/l, TSP: 5.15ug/l. Absense of long term effect at the limit of water solubility

## **Bioaccumulation**

No information available for the product.

# **Mobility in Soil**

No information available for the product.

#### **General Notes:**

Do not allow product to reach ground water, water course or sewage system. Toxic for aquatic organisms.

#### Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

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#### Other Adverse Effects:

No information available for this product

# \* \* \*Section 13 - DISPOSAL CONSIDERATIONS\* \* \*

## **Disposal Methods**

Dispose of contents/container in accordance with local/regional/national/international regulations.

## **Disposal of Contaminated Packaging**

Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

# \* \* \*Section 14 - TRANSPORT INFORMATION\* \* \*

## **US DOT Information**

Shipping Name: Not regulated for transport

UN/NA #: Not Regulated

Not DOT Hazardous in non-bulk packaging (Drums / Pails)

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# Transport of dangerous goods by sea:

With regard to IMDG 40-20:

14.1 UN number

14.2 UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Phenol, styrenated)

14.3 Transport hazard class(es): 9

Labels: 9

14.4 Packing group, if applicable: |||
14.5 Marine pollutant: Yes

14.6 Special precautions which a user needs to be aware of, or needs to comply with, in

connection with transport or conveyance either within or outside their premises

Special regulations: 335, 969, 274
EmS Codes: F-A, S-F
Physico-Chemical properties: see section 9

Limited quantities: 5 L

Segregation group: Non-applicable

14.7 Transport in bulk (according Non-applicable

to Annex II of MARPOL 73/78

and the IBC Code):

## Transport of dangerous goods by air:

With regard to IATA/ICAO 2022:

**14.1 UN number**: UN3082

**14.2 UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (Phenol, styrenated)

14.3 Transport hazard class(es): 9

Labels: 9

14.4 Packing group, if applicable: III

14.5 Marine pollutant: Yes

14.6 Special precautions which a user needs to be aware of, or needs to comply with, in

Connection with transport or conveyance either within or outside their premises

Physico-Chemical properties: see section 9

14.7 Transport in bulk (according to Non-applicable

Annex II of MARPOL 73/78 and

the IBC Code):

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## \* \* \*Section 15 - REGULATORY INFORMATION\* \* \*

#### **U.S. Federal Regulations**

Safety, health and environmental regulations/legislation specific for the substance or mixture

## Sara

Section 355 (	extremely hazardous substances) >0.1%	
108-95-2	Phenol	
Section 313 (	Specific toxic chemical listings) with De Minimis Limit 0.1%	
108-95-2	Phenol	
TSCA (Toxic S	Substances Control Act):	
Substance is lis	sted.	
Carcinogen	nic categories	
EPA (Environi	mental Protection Agency) >0.1%	
108-95-2	Phenol	
NIOSH-Ca (Na	ational Institute for Occupational Safety and Health) >0.1%	
Substance is n	not listed	
OSHA-Ca (Oc	cupational Safety & Health Administration) >0.1%	
Substance is n	not listed	

## **Canada Regulations**

This product has been classified in accordance with the criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR.

#### Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on SDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL:

## **Canadian WHMIS Information**

WHMIS CLASSIFICATION: D2

## **Component Analysis - Inventory**

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Phenol, styrenated	61788-44-1	Yes	Yes	EIN	Yes	Yes	Yes	Yes	Yes	Yes

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# \* \* \*Section 16 - OTHER INFORMATION\* \* \*

NFPA Ratings: Health: 2 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

#### HMIS RATINGS:

Health: 2 Fire: 1 Reactivity: 0

Pers. Prot.: B Minimum

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

## Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU -Australia: BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR -Controlled Products Regulations: DFG - Deutsche Forschungsgemeinschaft: DOT - Department of Transportation: DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH -National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH -Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL -Short-term Exposure Limit: TDG - Transportation of Dangerous Goods: TSCA - Toxic Substances Control Act: TWA - Time Weighted Average: UEL - Upper Explosive Limit; US - United States

#### Other Information

Reasonable care has been taken in the preparation of this information; however, the manufacturer makes no warranty whatsoever including the warranty of merchantability, expressed or implied, with respect to this information.