

# Material Safety Data Sheet



## NeoCryl A-5045

### Section 1. Chemical product and company identification

**Product name** : NeoCryl A-5045  
**Supplier** : DSM NeoResins+, Inc. Telephone : +1 (978) 658-6600  
730 Main Street  
Wilmington, MA 01887  
USA  
**Chemical formula** : Not applicable.  
**Material uses** : Resin used in the production of coatings, inks and/or adhesives  
**Emergency telephone number** : 800-424-9300 Medical Emergency  
For chemical emergency, spill, leak, fire, exposure or accident: call CHEMTREC day or night. DOMESTIC NORTH AMERICA 800-424-9300; INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

### Section 2. Hazards identification

**Physical state** : Liquid.  
**Odor** : Ammonia. [Slight]  
**Emergency overview** : DANGER!  
CAUSES DIGESTIVE TRACT BURNS. HARMFUL IF SWALLOWED. CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA. POSSIBLE REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS IN MALES, BASED ON ANIMAL DATA.  
Harmful if swallowed. Corrosive to the digestive tract. Causes burns. May be harmful if absorbed through skin. Severely irritating to eyes. Irritating to skin. Moderately irritating to the respiratory system. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not ingest. Do not get in eyes. Avoid contact with skin and clothing. Contains material that may cause target organ damage, based on animal data. Contains material which may cause birth defects, based on animal data. Avoid exposure during pregnancy. Contains material which may impair male fertility, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.  
**OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Hazardous Material Information System (U.S.A.)**

Health	1
Flammability	1
Physical hazards	0
PERSONAL PROTECTION	

The PPE (Personal Protection Equipment) designation in the HMIS is provided for use by employees at supplier sites only. Other users of this product are encouraged to evaluate the hazards of the product and assign PPE that is applicable to their specific situations.

#### Potential acute health effects

**Inhalation** : Moderately irritating to the respiratory system.  
**Ingestion** : Toxic if swallowed. Corrosive to the digestive tract. Causes burns.

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- Skin** : Harmful in contact with skin. Irritating to skin.  
**Eyes** : Severely irritating to eyes. Risk of serious damage to eyes.

#### **Potential chronic health effects**

- Chronic effects** : Contains material that may cause target organ damage, based on animal data.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Teratogenicity** : Contains material which may cause birth defects, based on animal data.  
**Developmental effects** : No known significant effects or critical hazards.  
**Fertility effects** : Contains material which may impair male fertility, based on animal data.  
**Target organs** : Contains material which may cause damage to the following organs: liver, cardiovascular system, upper respiratory tract, skin, eyes, nose/sinuses.  
**Medical conditions aggravated by over-exposure** : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

### **Section 3. Composition/information on ingredients**

<b>Name</b>	<b>CAS number</b>	<b>% by weight</b>
Butyl benzyl phthalate	85-68-7	1- 10
Nonylphenol, ethoxylated (9EO)	9016-45-9	1- 10
styrene	100-42-5	0.01 - 0.1

**There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

### **Section 4. First aid measures**

- Eye contact** : Rinse with plenty of running water. Get medical attention if symptoms occur.  
**Skin contact** : Take off immediately all contaminated clothing. Wash with soap and water. Get medical attention.  
**Inhalation** : If inhaled, remove to fresh air. Prevent cooling of the person. Keep victim at rest in half-upright position. If not breathing, give artificial respiration. Get medical attention.  
**Ingestion** : If swallowed, rinse mouth with water (only if the person is conscious). Seek medical attention.  
**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.  
**Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### **Section 5. Fire-fighting measures**

- Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.  
**Hazardous thermal decomposition products** : In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, organic acids.  
**Extinguishing media**  
**Suitable** : Use water, foam or dry chemical powder.  
**Special fire-fighting procedures** : Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.  
**Protection of fire-fighters** : Wear suitable protective clothing. Self-contained breathing apparatus.

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## Section 6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Prevent entry into sewers, basements or confined areas. Dike if necessary. In case of contamination of aquatic environment, inform local authorities.
- Methods for cleaning up** : Prevent entry into sewers, basements or confined areas. Dike if necessary. Absorb spill with inert material (e.g. dry sand or earth) and place in a chemical waste container. Recycle, if possible. Avoid release to the environment. This material and its container must be disposed of as hazardous waste. Keep away from sources of ignition.

## Section 7. Handling and storage

- Handling** : Use in closed systems. Avoid contact with eyes, skin and clothing. Do not allow to enter drains or watercourses.
- Storage** : Store in a fireproof location. Keep away from incompatibles such as flammable substances, oxidizing substances and corrosive substances. Keep away from incompatible materials and avoid specific conditions (See section 10). Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

- Engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Personal protection**
- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

### Product name

styrene

### Exposure limits

#### **ACGIH TLV (United States, 2/2010).**

TWA: 20 ppm 8 hour(s).  
 TWA: 85 mg/m<sup>3</sup> 8 hour(s).  
 STEL: 40 ppm 15 minute(s).  
 STEL: 170 mg/m<sup>3</sup> 15 minute(s).

#### **OSHA PEL 1989 (United States, 3/1989).**

TWA: 50 ppm 8 hour(s).  
 TWA: 215 mg/m<sup>3</sup> 8 hour(s).  
 STEL: 100 ppm 15 minute(s).  
 STEL: 425 mg/m<sup>3</sup> 15 minute(s).

#### **OSHA PEL Z2 (United States, 11/2006).**

TWA: 100 ppm 8 hour(s).  
 CEIL: 200 ppm  
 AMP: 600 ppm 5 minute(s).

#### **NIOSH REL (United States, 6/2009).**

TWA: 50 ppm 10 hour(s).  
 TWA: 215 mg/m<sup>3</sup> 10 hour(s).

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STEL: 100 ppm 15 minute(s).  
STEL: 425 mg/m<sup>3</sup> 15 minute(s).

Consult local authorities for acceptable exposure limits.

Remarks : If respiratory protection is needed, use a NIOSH certified respirator with an Assigned Protection Factor (APF) of at least 10.

## Section 9. Physical and chemical properties

Physical state : Liquid.  
Flash point : Closed cup: >100°C (>212°F) [(estimate)]  
Color : Milky white [Light]  
Odor : Ammonia. [Slight]  
pH : 9.2 to 9.8  
Boiling point : 100°C (212°F)  
Specific gravity : 1.04

## Section 10. Stability and reactivity

Stability and reactivity : The product is stable.  
Conditions to avoid : Keep away from heat, sparks and flame.  
Materials to avoid : No special recommendations.  
Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Butyl benzyl phthalate	LD Oral	Mouse	2.3 g/kg	-
	LD50 Dermal	Rabbit	>10000 mg/kg	-
	LD50 Dermal	Rat	6700 mg/kg	-
	LD50 Dermal	Mouse	6700 mg/kg	-
	LD50 Oral	Mouse	4170 mg/kg	-
	LD50 Oral	Rat	2330 mg/kg	-
	TDL <sub>o</sub> Oral	Mouse	1124 mg/kg	-
Nonylphenol, ethoxylated (9EO)	LC50 Inhalation Dusts and mists	Rat	>6.7 mg/l	4 hours
	LD50 Dermal	Rabbit	2830 mg/kg	-
styrene	LD50 Dermal	Rabbit	1710 mg/kg	-
	LD50 Oral	Rat	2590 mg/kg	-
	LD50 Oral	Rat	1310 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
	LC50 Inhalation Vapor	Rat	12 g/m <sup>3</sup>	4 hours

Conclusion/Summary : Not available.

### Chronic toxicity

Conclusion/Summary : Not available.

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation

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Butyl benzyl phthalate Nonylphenol, ethoxylated (9EO)	Eyes - Mild irritant Skin - Irritant	Rabbit Mammal - species unspecified	-	24 hours	-
	Respiratory - Mild irritant	Mammal - species unspecified	-	-	-
styrene	Respiratory - Irritant	Mammal - species unspecified	-	-	-

**Conclusion/Summary** : Not available.

**Sensitizer**

**Conclusion/Summary** : Not available.

**Carcinogenicity**

**Conclusion/Summary** : Not available.

**Classification**

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Butyl benzyl phthalate	-	3	-	-	-	-
styrene	A4	2B	-	-	Possible	-

**Mutagenicity**

**Conclusion/Summary** : Not available.

**Teratogenicity**

**Conclusion/Summary** : Not available.

**Reproductive toxicity**

**Conclusion/Summary** : Not available.

## Section 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

**Aquatic ecotoxicity**

Product/ingredient name	Result	Species	Exposure
Butyl benzyl phthalate	Acute EC50 1000 ug/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute EC50 >960 ug/L Fresh water	Daphnia - Daphnia magna - <=24 hours	48 hours
	Acute LC50 43 mg/L Fresh water	Fish - Lepomis macrochirus - Young of the year - 0.32 to 1.2 g	96 hours
	Acute LC50 2320 ug/L Fresh water	Fish - Pimephales promelas - 0.88 g	96 hours
	Acute LC50 1500 ug/L Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 29 to 40 mm	96 hours
	Acute LC50 820 ug/L Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 39 to 62 mm	96 hours
Nonylphenol, ethoxylated (9EO)	Acute LC50 >780 ug/L Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling) - 29 to 40 mm	96 hours
	Acute EC50 17000 ug/L Fresh water	Daphnia - Daphnia magna - Adult	48 hours
	Acute EC50 12200 ug/L Fresh water	Daphnia - Daphnia magna - LARVAE - 24 hours	48 hours
	Acute LC50 >1000000 ug/L Fresh water	Fish - Lepomis macrochirus - 1 g	96 hours
	Acute LC50 >10000 ug/L Fresh water	Fish - Lepomis macrochirus - 1 g	96 hours
	Acute LC50 7900 ug/L Fresh water	Fish - Lepomis macrochirus - 1 g	96 hours
Acute LC50 7600 ug/L Fresh water	Fish - Lepomis macrochirus - 1 g	96 hours	
Acute LC50 4700 ug/L Fresh water	Fish - Oncorhynchus mykiss - 12 to 16 cm	96 hours	

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styrene	Acute LC50 2400 to 2800 ug/L Fresh water	Fish - Lepomis macrochirus - 1 g	96 hours
	Acute LC50 1300 ug/L Fresh water	Fish - Lepomis macrochirus - 1 g	96 hours
	Acute EC50 4.9 mg/l	Algae	72 hours
	Acute EC50 4.7 mg/l	Daphnia	48 hours
	Acute LC50 4.02 mg/l	Fish	96 hours
	Chronic NOEC 1.01 mg/l	Daphnia	21 days

**Conclusion/Summary** : Not available.

#### Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Butyl benzyl phthalate	OECD 301C Ready Biodegradability - Modified MITI Test (I)	81 % - 28 days	-	-

**Conclusion/Summary** : Not available.

### Section 13. Disposal considerations





**Waste disposal** : Waste must be disposed of in accordance with national and local environmental regulations.

Disposal should be in accordance with applicable regional, national and local laws and regulations.



Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Consult your local or regional authorities.

### Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Class	Packing group	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
Mexico Classification	Not regulated.	-	-	-		-
ADR/RID Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Butyl benzyl phthalate)	9	III	 	<b>Tunnel code</b> (E)
IMDG Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Butyl benzyl phthalate). Marine pollutant (Butyl benzyl phthalate, Nonylphenol, ethoxylated (9EO))	9	III	 	-

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IATA-DGR Class	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Butyl benzyl phthalate)	9	III	 	-
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## Section 15. Regulatory information

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

**SARA 313**

Form R - Reporting requirements : No products were found.

State regulations : **Connecticut Carcinogen Reporting:** None of the components are listed.  
**Connecticut Hazardous Material Survey:** None of the components are listed.  
**Florida substances:** None of the components are listed.  
**Illinois Chemical Safety Act:** None of the components are listed.  
**Illinois Toxic Substances Disclosure to Employee Act:** None of the components are listed.  
**Louisiana Reporting:** None of the components are listed.  
**Louisiana Spill:** None of the components are listed.  
**Massachusetts Spill:** None of the components are listed.  
**Massachusetts Substances:** The following components are listed: BUTYL BENZYL PHTHALATE  
**Michigan Critical Material:** None of the components are listed.  
**Minnesota Hazardous Substances:** None of the components are listed.  
**New Jersey Hazardous Substances:** The following components are listed: BUTYL BENZYL PHTHALATE; 1,2-BENZENEDICARBOXYLIC ACID, BUTYL PHENYLMETHYL ESTER  
**New Jersey Spill:** None of the components are listed.  
**New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.  
**New York Acutely Hazardous Substances:** The following components are listed: Butyl benzyl phthalate  
**New York Toxic Chemical Release Reporting:** None of the components are listed.  
**Pennsylvania RTK Hazardous Substances:** The following components are listed: 1,2-BENZENEDICARBOXYLIC ACID, BUTYL PHENYLMETHYL ESTER  
**Rhode Island Hazardous Substances:** None of the components are listed.

**California Prop. 65**

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.  
**WARNING:** This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

<u>Ingredient name</u>	<u>Cancer</u>	<u>Reproductive</u>	<u>No significant risk level</u>	<u>Maximum acceptable dosage level</u>
Butyl benzyl phthalate	No.	Yes.	No.	No.
Ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.
residual reactant	Yes.	No.	Yes.	No.

United States inventory (TSCA 8b) : All components are listed or exempted.

## Section 16. Other information

**Label requirements** : CAUSES DIGESTIVE TRACT BURNS. HARMFUL IF SWALLOWED. CAUSES EYE AND SKIN IRRITATION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE BIRTH DEFECT HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE BIRTH DEFECTS, BASED ON ANIMAL DATA. POSSIBLE REPRODUCTIVE HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE ADVERSE REPRODUCTIVE EFFECTS IN MALES, BASED ON ANIMAL DATA.

**National Fire Protection Association (U.S.A.)** :



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### Notice to reader

The information contained in the Material Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

**Sources of key data** : Literature data and/or investigation reports are available through the manufacturer.

**Alterations compared to the previous version** : Alterations compared to the previous version are marked with a little (blue) triangle.