Material Safety Data Sheet

NEOCRYL A-6044

Section 1. Chemical product and company identification

Product name : NEOCRYL A-6044

Supplier : DSM NeoResins+, Inc.
730 Main Street
Wilmington, MA 01887
USA
Telephone : +1 (978) 658-6600

Material uses : Resin system used in the production of coatings.

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 : Acrylic [Slight]

Emergency overview : WARNING!

CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA.

Irritating to eyes, respiratory system and skin. Defatting to the skin. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Avoid contact with eyes, skin and clothing. Contains material that may cause target organ damage, based on animal data. Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. 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 : Irritating to respiratory system.

Ingestion : No known significant effects or critical hazards.

Skin : Irritating to skin.

Eyes : Irritating to eyes.

Potential chronic health effects

Chronic effects : Contains material that may cause target organ damage, based on animal data. Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

Carcinogenicity : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

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Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Target organs : Contains material which may cause damage to the following organs: blood, lungs, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea, testes.

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

Name	CAS number	% by weight
Poly Emulsion 392N35		1- 10
1-Methoxypropan-2-ol	107-98-2	1- 10
propanol, oxybis-	25265-71-8	1- 10
Solvent naphtha (petroleum), light arom.	64742-95-6	1- 10
1,2,4-trimethylbenzene	95-63-6	1- 10
Cumene	98-82-8	0.1 - 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 : Wash with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Inhalation : If inhaled, remove to fresh air. Get medical attention if symptoms occur.

Ingestion : If swallowed, rinse mouth with water (only if the person is conscious). Get medical attention if symptoms occur.

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.

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, nitrogen oxides (NO, NO_2 etc.), ammonia (NH_3), amines.

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.

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. Avoid breathing 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.

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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. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. 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 with adequate ventilation. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Take measures against static discharge. Keep away from sources of ignition. Do not allow to enter drains or watercourses.

Storage : Store in a fireproof location. Keep away from incompatible materials and avoid specific conditions (See section 10). Use appropriate containment to avoid environmental contamination. Sensitive to frost

Storage temperature : Store between the following temperatures: 5 and 40 °C.

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. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Product name	Exposure limits
1-Methoxypropan-2-ol	**ACGIH TLV (United States, 3/2012).** TWA: 100 ppm 8 hours. TWA: 369 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 553 mg/m³ 15 minutes. **OSHA PEL 1989 (United States, 3/1989).** TWA: 100 ppm 8 hours. TWA: 360 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 540 mg/m³ 15 minutes. **NIOSH REL (United States, 6/2009).** TWA: 100 ppm 10 hours. TWA: 360 mg/m³ 10 hours. STEL: 150 ppm 15 minutes. STEL: 540 mg/m³ 15 minutes.
1,2,4-trimethylbenzene	**ACGIH TLV (United States, 3/2012).** TWA: 25 ppm 8 hours. TWA: 123 mg/m³ 8 hours. **OSHA PEL 1989 (United States, 3/1989).** TWA: 25 ppm 8 hours. TWA: 125 mg/m³ 8 hours. **NIOSH REL (United States, 6/2009).** TWA: 25 ppm 10 hours.

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	TWA: 125 mg/m³ 10 hours.
Cumene	**OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.** TWA: 50 ppm 8 hours. TWA: 245 mg/m³ 8 hours. **NIOSH REL (United States, 6/2009). Absorbed through skin.** TWA: 50 ppm 10 hours. TWA: 245 mg/m³ 10 hours. **ACGIH TLV (United States, 3/2012).** TWA: 50 ppm 8 hours. **OSHA PEL (United States, 6/2010). Absorbed through skin.** TWA: 50 ppm 8 hours. TWA: 245 mg/m³ 8 hours.

Consult local authorities for acceptable exposure limits.

Section 9. Physical and chemical properties

Physical state	:	Liquid.
Flash point	:	Closed cup: >100°C (>212°F) [(estimate)]
Flammable limits	:	Lower: 1%
Color	:	White.
Odor	:	Acrylic [Slight]
pH	:	7.7 to 8.3
Boiling point	:	>100°C (>212°F)
Specific gravity	:	1.02
Solubility	:	Partially soluble in the following materials: cold water and hot water.

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	:	Strong oxidizing materials
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
Solvent naphtha (petroleum), light arom.	LD50 Implant	Rabbit	>3160 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
propanol, oxybis-	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	14850 mg/kg	-
1-Methoxypropan-2-ol	LC50 Inhalation Vapor	Rat	55 mg/l	4 hours
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
Cumene	LC50 Inhalation Vapor	Rat	40 mg/l	4 hours
	LC50 Inhalation Vapor	Rat	39000 mg/m³	4 hours
	LD50 Oral	Rat	2.9 g/kg	-
1,2,4-trimethylbenzene	LC50 Inhalation Vapor	Rat	18 mg/l	4 hours
	LD50 Oral	Rat	5 g/kg	-

Conclusion/Summary : **1-methoxy-2-propanol**: Chronic exposure. Inhalation dose of 3000 ppm/6H using rats, exposure time of 6-15D pregnant resulted in musculoskeletal developmental abnormalities. Inhalation dose of 3000 ppm/6H using rats, multigenerational exposure time resulted in other maternal effects. One newborn had live birth index and physical effects.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

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Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Cumene	-	2B	-	-	-	-

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
Cumene	Acute EC50 1.2 mg/l	Crustaceans	96 hours
	Acute EC50 10600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute IC50 2.6 mg/l	Algae	72 hours
	Acute LC50 2700 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.32 mg/l	Daphnia	21 days
1,2,4-trimethylbenzene	Acute LC50 17000 µg/l Marine water	Crustaceans - Cancer magister - Zoea	48 hours
	Acute LC50 7720 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Conclusion/Summary : Not available.

Persistence/degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Cumene	-	70 % - Readily - 20 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	Not regulated.	-	-	-		-

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IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

Special precautions for user **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15. Regulatory information

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

SARA 313

		Product name	CAS number	Concentration
Form R - Reporting requirements	:	1,2,4-trimethylbenzene	95-63-6	1.2375
Supplier notification	:	1,2,4-trimethylbenzene	95-63-6	1.2375

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

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: PSEUDOCUMENE; PROPYLENE GLYCOL METHYL ETHER
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: CUMENE; BENZENE, (1-METHYLETHYL)-; PSEUDOCUMENE; 1,2,4-TRIMETHYL BENZENE; PROPYLENE GLYCOL MONOMETHYL ETHER; 1-METHOXY-2-PROPANOL
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: Cumene; Benzene, 1-methylethyl-
New York Toxic Chemical Release Reporting: None of the components are listed.
Pennsylvania RTK Hazardous Substances: The following components are listed: BENZENE, (1-METHYLETHYL)-; PSEUDOCUMENE; PROPANOL, OXYBIS-; 2-PROPANOL, 1-METHOXY-
Rhode Island Hazardous Substances: None of the components are listed.

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.
WARNING: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Cumene	Yes.	No.	No.	No.
BYK-A-535	Yes.	No.	No.	No.
Toluene	No.	Yes.	No.	7000 µg/day (ingestion)
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
Naphthalene	Yes.	No.	Yes.	No.
formaldehyde	Yes.	No.	Yes.	No.

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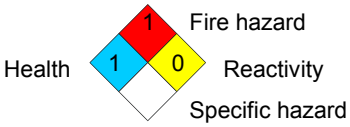
methanol	No.	Yes.	No.	No.

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

Section 16. Other information

Label requirements : CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, 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.