

Material Safety Data Sheet



NeoCryl A-2082

Section 1. Chemical product and company identification

Product name : NeoCryl A-2082
Supplier : DSM NeoResins+, Inc. Telephone : +1 (978) 658-6600
730 Main Street
Wilmington, MA 01887
USA
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 : WARNING!
CAUSES EYE IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
Irritating to eyes. Slightly irritating to the respiratory system. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Contains material that may cause target organ damage, 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 : Slightly irritating to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion : No known significant effects or critical hazards.
Skin : No known significant effects or critical hazards.
Eyes : Irritating 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.

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Teratogenicity	: No known significant effects or critical hazards.
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: lungs, upper respiratory tract, eyes, 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
Ammonia, aqueous solution 100%	1336-21-6	0.1 - 1
Ethanol	64-17-5	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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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	: No special measures required.
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	: No special measures required.
Methods for cleaning up	: Absorb spill with inert material (e.g. dry sand or earth) and place in a chemical waste container. Recycle, if possible. Clean up affected area with a large amount of water.

Section 7. Handling and storage

Handling	: Use with adequate ventilation.
Storage	: Store in a fireproof location. Keep away from incompatible materials and avoid specific conditions (See section 10). Sensitive to frost. shake/mix before use.
Storage temperature	: Store between the following temperatures: 5 and 30 °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.
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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	: No special protection is required. In case of insufficient ventilation, wear suitable respiratory equipment.
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

Ethanol

Exposure limits

ACGIH TLV (United States, 2/2010).

STEL: 1000 ppm 15 minute(s).

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

TWA: 1000 ppm 8 hour(s).

TWA: 1900 mg/m³ 8 hour(s).

NIOSH REL (United States, 6/2009).

TWA: 1000 ppm 10 hour(s).

TWA: 1900 mg/m³ 10 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 1000 ppm 8 hour(s).

TWA: 1900 mg/m³ 8 hour(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.
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Section 9. Physical and chemical properties

Physical state	: Liquid.
Flash point	: Closed cup: >93.3°C (>199.9°F) [Closed cup]
Color	: Milky white.
Odor	: Ammonia. [Slight]
pH	: 8 to 9
Boiling point	: 100°C (212°F)
Specific gravity	: 1.05
Vapor pressure	: 2.3 kPa (17.251 mm Hg) [20°C]
Viscosity	: Dynamic: 300 mPa·s (300 cP)
Dispersibility properties	: Easily dispersible in the following materials: cold water and hot water.
Solubility	: Partially soluble in the following materials: cold water and hot water.
Remarks	: Miscible in water.

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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	: Oxidizing substances.
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
Ethanol	LD50 Oral	Mouse	10.5 mL/kg	-
	LD50 Oral	Rat	7060 mg/kg	-
	LD50 Oral	Rabbit	6300 mg/kg	-
	TDLo Oral	Rat	1 g/kg	-
	TDLo Oral	Rat	4.8 mL/kg	-
	TDLo Oral	Rat	4.57 mL/kg	-
	TDLo Oral	Rat	4 mL/kg	-
	TDLo Oral	Mouse	3.08 mL/kg	-
	TDLo Oral	Mouse	6000 mg/kg	-
	TDLo Oral	Rat	1000 mg/kg	-
	LC50 Inhalation Vapor	Rat	124700 mg/m3	4 hours

Conclusion/Summary : Not available.

Chronic toxicity

Conclusion/Summary : Not available.

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitizer

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Ethanol	A3	1	-	None.	-	-

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Ammonia, aqueous solution 100%	Ames test	Experiment: In vitro Subject: Bacteria	Negative
Ethanol	Ames test	Experiment: In vitro Subject: Bacteria	Negative

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
Ethanol	Acute EC50 9268 to 14221 mg/l	Daphnia	48 hours
	Acute LC50 13000 mg/L	Fish	96 hours
	Acute LC50 12720 ppm Fresh water	Fish - Pimephales promelas - 40 mm	96 hours
	Acute LC50 14200000 ug/L Fresh water	Fish - Pimephales promelas - 30 days - 19.4 mm - 0.099 g	96 hours
	Acute LC50 >100000 ug/L Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Wearling) - 0.2 to 0.5 g	96 hours
	Chronic NOEC <6.3 g/L Fresh water	Daphnia - Daphnia magna	48 hours

Conclusion/Summary : Not available.

Persistence/degradability

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

Section 15. Regulatory information

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

SARA 313

	<u>Product name</u>	<u>CAS number</u>	<u>Concentration</u>
Form R - Reporting requirements	: Ammonia, aqueous solution 100%	1336-21-6	1
Supplier notification	: Ammonia, aqueous solution 100%	1336-21-6	1

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: AMMONIUM HYDROXIDE
- 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: AMMONIUM HYDROXIDE; ETHYL ALCOHOL; ALCOHOL
- 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: Ammonium hydroxide
- New York Toxic Chemical Release Reporting:** None of the components are listed.
- Pennsylvania RTK Hazardous Substances:** The following components are listed: AMMONIUM HYDROXIDE ((NH₄)(OH)); DENATURED ALCOHOL
- Rhode Island Hazardous Substances:** None of the components are listed.

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

Section 16. Other information

Label requirements : CAUSES EYE IRRITATION. MAY CAUSE RESPIRATORY TRACT IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

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



Date of printing : 12/13/2011.
 Date of issue : 12/12/2011.
 Date of previous issue : No previous validation.
 Version : 3
 Code : 030062WW44011
Notice to reader

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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.