

NORLAND PRODUCTS INCORPORATED

 1095 Cranbury South River Road – Suite 20 Jamesburg, NJ 08831

 Tel • 609-395-1966
 Fax • 609-395-9006

SAFETY DATA SHEET

For Emergency: Telephone (609) 395-1966 Date Prepared: November 12, 2024

1. <u>IDENTIFICATION OF THE PRODUCT AND THE COMPANY</u>

TRADE NAME:	Norland Optical Adl	hesive 170
TRADE CODE:	NOA 170	
PRODUCT USE:	Ultraviolet Curing Ad	lhesive
MANUFACTURER &	-	
SUPPLIER:	NORLAND PRODUCTS IN	IC
	1095 Cranbury South River R	oad
	Suite 20	
	Jamesburg, NJ 08831 USA	
TELEPHONE:	(609) 395-1966	FAX:
EMAIL:	SDS@norlandproducts.com	

(609) 395-9006

2. HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture GHS-US Classification

Acute Oral Toxicity:	Cat. 4
Skin Sensitization:	Cat. 1A
Eye Damage/Irritation:	Cat. 2A

Pictogram



Signal Word: Warning

2.2 Label El	ements GHS	S-US Labeling	
Hazard S	Hazard Statements (GHS-US)		
H302	Harmful	if Swallowed	
H315	Causes S	Skin Irritation	
H317	May Ca	use an Allergic Skin Reaction	
H319	Causes S	Serious Eye Irritation	
Precauti	onary Staten	nents:	
P301+ P	317	If Swallowed: Get medical help	
P333+P3	317	If Skin Irritation or Rash Occurs: Get medical help	
P305+ P	351+P338	If in Eyes: Rinse cautiously with water for several minutes. Remove	
		contact lenses, if present and easy to do. Continue rinsing. Seek medical	
		attention.	
P280	Wear Pr	otective Gloves/protective clothing/eye protection/face protection	
P501	Dispose	of contents/container in accordance with local, regional, national and	
international regulations			
P403+1	P233+ P235	Store in a well-ventilated place. Keep container tightly closed.	
		Keep cool.	

Other Hazard: None Known

3. COMPOSITION/ INFORMATION ON INGREDIENTS

	Chemical Nature:	Acrylate related	d resin based f	formulation	1
	Composition: Acrylated Resin	<u>Cas#:</u> Trade Secret	<u>Content:</u> 40-60%	GHS-US H302 H315 H317 H319	Classifications for All Chemicals Cat. 4 Harmful If Swallowed Cat. 2 Skin Corrosion/ Irritation Cat. 3 Skin Sensitization Cat. 2A Eye Damage/Irritation
	Acrylic Monomer	Trade Secret	10-20%		
	Zirconium Dioxide	314-23-4	20-45%		
4.	FIRST AID MEASURES	First Aiders sho	ould wear glove	es/protectiv	e clothes & eye/face protection
	In Case of Inhalation:	If tightness in the Get Medical att			ughing occurs, remove to fresh air. ist.
	In Case of Splashes in Eye:	amounts of w	ater, occasio	nally liftir	ately wash the eyes with copious ng the lower and upper eyelids. al attention immediately.
	In Case of Skin Contact:				ately wash the area with soap and develops, get Medical attention.
	In Case of Clothes Splattering:	Discard or was	h contaminate	d clothing	before reuse.
	In Case of Ingestion:	If material has alert. See docto			with milk or water if the victim is

First Aiders should wear gloves, protective clothing, eye/face protection if there is a potential for exposure to Liquid product.

5. FIRE-FIGHTING MEASURES

Extinguishing Media Recommended:	Carbon Dioxide, foam, dry chemical
Extinguishing Media Inadvisable:	Water. Jets of Water from fire hose
Special Hazards:	None
Hazardous Decomposition/Combustion Products:	Could generate carbon monoxide, carbon dioxide, sulfur dioxide or Hydrogen sulfide
Special Protection Equipment:	A Self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Measures For Personal Safety:

GLOVES:	Use gloves made from an impervious material (e.g. nitrile, butyl, or latex rubber)
	latex rubber may soften and become pervious if also exposed to organic solvents
RESPIRATOR	: Not required under normal operating conditions. Respiratory protection may be
	needed in unusual circumstances where significant exposure to fumes or mists can
	occur. A NIOSH approved air purifying respirator with an organic vapor cartridge
	would be recommended. Use must comply with OSHA (29 CFR 1910.134) and
	other regulatory standards.
EYE:	Wear Safety Glasses
FOOTWEAR:	Impervious shoes (e.g. leather, not cloth or sandals)

Ventilation Requirements:

A Fume Hood is not generally required. The room should have adequate ventilation to avoid potential for concentration of mist or vapors.

Environmental Measures:

Stop the product from entering the drainage system and the natural environment. Limit leakage with Earth.

Cleaning Methods:

```
Recovery:
```

Absorb material with paper towel or other absorbent. Place in container for disposal. If possible, expose absorbed resin to UV light or sunlight to solidify resin.

Cleaning/Decontamination:	Clean up with soap and water
Elimination:	Eliminate according to local and national regulations

7. HANDLING AND STORAGE

Handling:

Technical Measures;	Do not reuse container. This product is for Industrial use only. Practice good housekeeping and vigorous personal hygiene to minimize contact
	with material.
Precautions to Take:	Avoid Contact with skin and eyes

Storage: Store at 5°C to 25°C Keep away from Sunlight

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Precautionary Measure:	None
Exposure Limits:	None
Protective Personal Equipment:	
Respiratory:	Not needed with normal use
Protection for hands:	Use gloves made from an impervious material (e.g. nitrile, butyl or latex rubber. Latex rubber may soften and become pervious if also exposed to organic solvents.
Eye Protection:	Wear Safety Glasses
Protection from Skin:	Wear Clothing that provides protection to skin

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Color:	Clear Liquid
Odor:	Slight Acrylate Odor
pH:	No Data Available
Melting Point:	No Data Available
Boiling Point:	No Data Available
Decomposition Temperature:	>300°C
Flash Point:	175°C
Auto Ignition Temperature:	No Data Available
Explosive Properties:	None
Oxidizing Properties:	None
Vapor Pressure:	<0.1 @ 20°C
Density:	>1
Solubility/Miscibility:	
Solubility in Water:	Not miscible
Viscosity:	4400-5500 CPS @ 25°C
	_

10. STABILITY AND REACTIVITY

Conditions to Avoid:	Keep away from UV and Sunlight. Temperatures above 65°C may cause exothermic non-hazardous polymerization.
Substances to Avoid:	None
Hazardous Decomposition	
Products:	None

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	
Ingestion:	LD50 Oral (Rat): 1,000-2,000 mg/kg
Inhalation:	Method: OECD Test Guidelines 423 LC50 (Rat) >3.6v mg/l
	Method: OECD Test Guidelines 403
Local Effects:	
On Skin:	Slight irritating to skin
On Eyes:	Irritating to eyes
Long Term Toxicity:	
Skin Contact:	May cause sensitization by skin contact
Reproductive Toxicity:	No Data Available

12. ECOLOGICAL INFORMATION

Toxicity to Fish:	LC50 (Oncorhynchus Mykiss (rainbow trout): 0.42 mg/l
	Method: OECD Test Guidelines 203
Toxicity to Daphnia & Other:	EC50 (Daphnia Magna (Water Flea): 0.35 mg/l
Mobility:	Cured adhesives are immobile
General Ecological:	Do Not empty liquid into drains or ground water

13. DISPOSAL CONSIDERATION

Disposal Methods for Product and Waste:

Send to authorized disposal plants or for incineration under controlled conditions Disposal Methods for Contaminated Packaging:

Do not reuse package. Send to authorized disposal plants or for incineration under controlled Conditions.

You should comply with the local and national regulations in force when disposing.

14. TRANSPORTATION INFORMATION

International Regulations:

IATA-DGR	UN/ID No.	UN 3082 Environmenta	Illy Hazardous Substance: liquid Class 9
	Packing Group	o: III, low danger (z),	
	Packing Instru	ction: (cargo aircraft)	: 964 (passenger aircraft): 964
IMDG-Code	UN number:	UN 3082 Environmenta liquid packing group III	•

15. <u>REGULATORY INFORMATION</u>

Contains:

Acrylate related adhesives

US Federal Regulations

Unless otherwise noted, this product is in compliance with the inventory listing of the Countries shown below:

Europe (EINECS/ELINCS)	Listed/Registered
USA (TSCA)	Listed/Registered
Canada (DSL)	Listed/Registered
Australia (AICS)	Listed/Registered
Japan (MITI)	Listed/Registered
Korea (TCCL)	Listed/Registered
Philippines (PICCS)	Listed/Registered
China	Listed/Registered

16. OTHER INFORMATION

Custom Situation: Harmonized System (HTS/Schedule B) 3506.91.0000

Last Revision:	August 14, 2023
Latest Revision:	November 12, 2024

The information included 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 guidance for the 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 test.