

SECTION 1: IDENTIFICATION

Trade name: nora® PU 102 A

- Application of the substance / the mixture: 2-Component polyurethane adhesive (component A)
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
nora systems, Inc.
9 Northeastern Blvd.
Salem, NH 03079
Toll-Free: 800-332-NORA
- Information department: see Manufacturer/Supplier
- Emergency telephone number: 800-424-9300 CHEMTREC

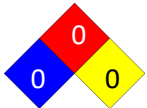
SECTION 2: HAZARD(S) IDENTIFICATION

- Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

- Additional information: Also observe SDS of component B.

- Label elements
- GHS label elements Void
- Hazard pictograms Void
- Signal word Void
- Hazard statements Void
- NFPA ratings (scale 0 - 4)



Health = 0

Flammability = 0

Reactivity = 0

- HMIS-ratings (scale 0 - 4)



Health = 0

Flammability = 0

Reactivity = 0

- Other hazards

NFPA Rating Scale: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe.

NFPA is the National Fire Protection Association.

HMIS Rating Scale: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe.

HMIS®, the Hazardous Materials Identification System, is a registered mark of the National Paint and Coatings Association (NPCA).

- Results of PBT and vPvB assessment
- PBT: Not applicable.

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- vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- Chemical characterization: Mixtures
- Description: 2-component Polyurethane adhesive (component A)

Hazardous ingredients:			
CAS: 14808-60-7	Quartz (crystalline silica)	 Carc. 1A, H350; STOT RE 1, H372	50 - 75%
CAS: 111-46-6	2,2'-oxybisethanol	 Acute Tox. 4, H302	1 - <3%

- Additional information:

This product contains crystalline silica (quartz sand) which has been classified by IARC as a Group 1 carcinogen (human carcinogen). Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. This product is used in liquid form only and therefore does not pose a dust hazard / carcinogen hazard during its use. However, respirable silica may be generated from working procedures such as grinding e.g. In general, inhalation of silica dust should be avoided. Therefore, for your own safety wear a suitable NIOSH-approved respirator in all occasions when handling of the product generates dust.

The exact percentages of the ingredients have been withheld by the manufacturer as trade secrets. For the wording of the listed hazard phrases refer to section 16.

SECTION 4: FIRST-AID MEASURES

- Description of first aid measures
- General information:
 - No special measures required.
 - However, also observe SDS of component B.
- After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- After skin contact: Immediately wash with water and soap and rinse thoroughly.
- After eye contact:
 - Rinse opened eye for several minutes under running water.
 - Call a doctor.
- After swallowing: Do not induce vomiting; immediately call for medical help.
- Information for doctor:
 - Most important symptoms and effects, both acute and delayed No further relevant information available.
 - Indication of any immediate medical attention and special treatment needed
 - Also observe SDS of component B.

SECTION 5: FIRE-FIGHTING MEASURES

- Extinguishing media
- Suitable extinguishing agents:
 - CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- For safety reasons unsuitable extinguishing agents: Water with full jet
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.

- Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

- Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

- Protective Action Criteria for Chemicals

· PAC-1:		
CAS: 14808-60-7	Quartz (crystalline silica)	0.075 mg/m3
CAS: 111-46-6	2,2'-oxybisethanol	6.9 ppm
· PAC-2:		
CAS: 14808-60-7	Quartz (crystalline silica)	33 mg/m3
CAS: 111-46-6	2,2'-oxybisethanol	140 ppm
· PAC-3:		
CAS: 14808-60-7	Quartz (crystalline silica)	200 mg/m3
CAS: 111-46-6	2,2'-oxybisethanol	860 ppm

SECTION 7: HANDLING AND STORAGE

- Handling:

- Precautions for safe handling

Keep out of the reach of children.

Wear suitable protective clothing, gloves and eye/face protection. Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Also observe SDS of component B.

- Information about protection against explosions and fires: No special measures required.

- Conditions for safe storage, including any incompatibilities

- Storage:

- Requirements to be met by storerooms and receptacles: No special requirements.

- Information about storage in one common storage facility: Not required.

- Further information about storage conditions: Keep receptacle tightly sealed.

- Specific end use(s) No further relevant information available.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters

· Components with limit values that require monitoring at the workplace:

CAS: 14808-60-7 Quartz (crystalline silica)

PEL	see Quartz listing
REL TLV	Long-term value: 0.05* mg/m ³ *respirable dust; See Pocket Guide App. A Long-term value: 0.025* mg/m ³

CAS: 111-46-6 2,2'-oxybisethanol

WEEL	Long-term value: 10 mg/m ³
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- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures:
The usual precautionary measures for handling chemicals should be followed.
Immediately remove all soiled and contaminated clothing.
Wear suitable protective clothing, gloves and eye/face protection.
Avoid contact with the eyes and skin.
Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Also observe the SDS of component B.
- Respiratory protection: Not necessary. Ensure that room is well-ventilated during processing.
- Protection of hands:



Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

- Material of gloves
Butyl rubber, BR
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.5 mm
- Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection:



Tightly sealed goggles

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- Information on basic physical and chemical properties
- General Information

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· Appearance:

Form:	Pasty
Color:	Beige
Odor:	Light

· Change in condition

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.

· Flash point:

Not applicable.

· Auto igniting:

Product is not self igniting.

· Danger of explosion:

Product does not present an explosion hazard.

· Density at 20 °C (68 °F):

1.6 g/cm³ (13.352 lbs/gal)

· Solubility in / Miscibility with

Water:	Not miscible or difficult to mix.
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· Viscosity:

Dynamic at 20 °C (68 °F):	180000 mPas
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· Other information

No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

- Reactivity No further relevant information available.
- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- Incompatible materials: No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.
- Additional information: Also observe the SDS of component B.

SECTION 11: TOXICOLOGICAL INFORMATION

- Information on toxicological effects
- Acute toxicity:
- Specific symptoms in biological assay:
- Primary route(s) of entry: Inhalation, skin contact, eye contact, ingestion.
- Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: No irritant effect.
- Sensitization: No sensitizing effects known.
- Subacute to chronic toxicity:

This product contains crystalline silica (quartz sand) which has been classified by IARC as a Group 1 carcinogen (human carcinogen). Evidence is based on the chronic and long-term exposure workers have had to respirable sized crystalline silica dust particles. This product is used in liquid form only and therefore does not pose a dust hazard / carcinogen hazard during its use. However, respirable silica may be generated from working procedures such as grinding e.g. In general, inhalation of silica dust should be avoided.

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Therefore, for your own safety wear a suitable NIOSH-approved respirator in all occasions when handling of the product generates dust.

· Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. Also observe the safety data sheet of component B.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
CAS: 14808-60-7	Quartz (crystalline silica)	1
· NTP (National Toxicology Program)		
CAS: 14808-60-7	Quartz (crystalline silica)	K
· OSHA-Ca (Occupational Safety & Health Administration)		
None of the ingredients is listed.		

SECTION 12: ECOLOGICAL INFORMATION

· Toxicity

· Aquatic toxicity: No further relevant information available.

· Persistence and degradability No further relevant information available.

· Behavior in environmental systems:

· Bioaccumulative potential No further relevant information available.

· Mobility in soil No further relevant information available.

· Additional ecological information:

· General notes: Do not allow product to reach ground water, water course or sewage system.

· Results of PBT and vPvB assessment

· PBT: Not applicable.

· vPvB: Not applicable.

· Other adverse effects No further relevant information available.

SECTION 13: DISPOSAL CONSIDERATIONS

· Waste treatment methods

· Recommendation:

Do not allow product to reach sewage system.

Mix both product components, allow to harden, and then dispose of as construction waste. Disposal should be in accordance with local, state or national legislation.

· Uncleaned packaging:

· Recommendation:

Empty contaminated packaging thoroughly. They can be recycled after thorough and proper cleaning.

SECTION 14: TRANSPORT INFORMATION

· DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	-
· DOT, ADR, ADN, IMDG, IATA	Void
· DOT, ADN, IMDG, IATA	
· Class	Void
· DOT, IMDG, IATA	Void

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· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport/Additional information: Not regulated as hazardous material according to the above specifications.	
· UN "Model Regulation":	Void

SECTION 15: REGULATORY INFORMATION

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA (Superfund Amendments and Reauthorization Act)

· EPCRA Section 302 (Extremely Hazardous Substances):

None of the ingredient is listed.

· SARA Title III Section 313 (Toxic Release Inventory - TRI):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65 (California)

· Chemicals known to cause cancer:

CAS: 14808-60-7	Quartz (crystalline silica)
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· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenicity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

CAS: 14808-60-7	Quartz (crystalline silica)	A2
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· NIOSH-Ca (National Institute for Occupational Safety and Health)

CAS: 14808-60-7	Quartz (crystalline silica)
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· GHS label elements Void

· Hazard pictograms Void

· Signal word Void

· Hazard statements Void

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Recommended restriction of use For professional use only.
- Contact: see Manufacturer/Supplier
- Date of preparation / last revision: 12/04/2017
- Abbreviations and acronyms:

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit Acute Tox. 4: Acute toxicity – Category 4

Carc. 1A: Carcinogenicity – Category 1A

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1