nora® 365 A
Safety Data Sheet
According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 05/12/2015  Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier
Product Form: Mixture
Product Name: nora® 365 A

1.2. Intended Use of the Product
Recommended Use: Adhesive.
Restrictions on Use: N.A.

1.3. Name, Address, and Telephone of the Responsible Party
Company
nora systems, Inc.
9 Northeastern Blvd
Salem, NH 03079
T 800-332-NORA
www.nora.com/us

1.4. Emergency Telephone Number
Emergency Number: 800-424-9300  CHEMTREC (USA)
613-996-6666  CANUTEC (CAN)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture
Classification (GHS-US)
Skin Sens. 1A  May cause an allergic skin reaction.
Muta. 2  Suspected of causing genetic defects if inhaled.
Carc. 1A  May cause cancer if inhaled.
Repr. 2  Suspected of damaging fertility or the unborn child if inhaled.
STOT RE 1  Causes damage to organs through prolonged or repeated exposure if inhaled.
Aquatic Chronic 3  Harmful to aquatic life with long lasting effects.

2.2. Label Elements
GHS-US Labeling
Hazard Pictograms (GHS-US):

Signal Word (GHS-US): Danger
Hazard Statements (GHS-US):
H317 - May cause an allergic skin reaction.
H341.A – Suspected of causing genetic defects if inhaled
H350.A – May cause cancer if inhaled.
H361.A – Suspected of damaging fertility or the unborn child if inhaled.
H372.A – Causes damage to organs through prolonged or repeated exposure if inhaled.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary Statements (GHS-US):
P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P264.2 – Wash skin thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P272 – Contaminated work clothing must not be allowed out of the workplace.
P273 – Avoid release to the environment.
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2.3. Ingredients With Unknown Acute Toxicity
None.

2.4. Hazards Not Otherwise Classified Identified During the Classification Process
None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
N.A.

3.2. Mixtures
Hazardous components within the meaning of 29 CFR 910.1200 and related classification.

List of Components:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Name</th>
<th>Identification Number</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10 %</td>
<td>Epoxy Resin</td>
<td>CAS:25068-38-6 EC:500-033-5 Index:603-074-00-8</td>
<td>Eye Irrit. 2A, H319; Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411</td>
</tr>
<tr>
<td>1-5 %</td>
<td>o-Cresylglycidyl ether</td>
<td>CAS:2210-79-9</td>
<td>Skin Irrit. 2, H315; Skin Sens. 1A, H317; Muta. 2, H341</td>
</tr>
<tr>
<td>1-5 %</td>
<td>Silica Sand</td>
<td>CAS:14808-60-7</td>
<td>Carc. 1A, H350.A; STOT RE 1, H372.A</td>
</tr>
<tr>
<td>0.1-1 %</td>
<td>Nonylphenol</td>
<td>CAS:25154-52-3</td>
<td>Repr. 2, H361; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302</td>
</tr>
</tbody>
</table>

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures
In case of skin contact: Immediately take off all contaminated clothing. Remove contaminated clothing immediately and dispose of safely.

In case of eyes contact: Wash immediately with water.

In case of Ingestion: Do not induce vomiting; get medical attention showing the SDS and the hazard label.

In case of Inhalation: If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

4.2. Most Important Symptoms and Effects, both Acute and Delayed
N.A.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed
In case of accident or un-wellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media
Suitable Extinguishing Media: Water. Carbon dioxide (CO2).

Unsuitable Extinguishing Media: None in particular.
5.2. Special Hazards Arising From the Chemical
Do not inhale explosion and combustion gases. Burning produces heavy smoke.
Hazardous combustion products: N.A.
Explosive properties: N.A.
Oxidizing properties: N.A.

5.3. Special Protective Equipment and Precautions for Fire-Fighters
Use suitable breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard are if it can be done safely.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures
Wear personal protection equipment. Wear breathing apparatus if exposed to vapors/dusts/aerosols. Provide adequate ventilation. Use appropriate respiratory protection. See protective measures under point 7 and 8.

6.2. Methods and Material for Containment and Cleaning Up
Suitable material for taking up: absorbing material, organic, sand. Wash with plenty of water.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling
Avoid contact with skin and eyes, inhalation of vapors and mists. Exercise the greatest care when handling or opening the container. Use localized ventilation system. Don’t use empty container before they have been cleaned. Before making transfer operations, assure that there aren’t any incompatible material residuals in the containers. Contaminated clothing should be changed before entering eating areas. Do not eat or drink while working. See also section 8 for recommended protective equipment.

7.2. Conditions for Safe Storage, Including Any Incompatibilities
Storage temperature: N.A.
Incompatible materials: None in particular.
Instructions as regards storage premises: Adequately ventilated premises.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters
List of Components with OEL Value:

<table>
<thead>
<tr>
<th>Component</th>
<th>OEL Type</th>
<th>Country</th>
<th>Ceiling</th>
<th>Long Term mg/m3</th>
<th>Long Term ppm</th>
<th>Short Term mg/m3</th>
<th>Short Term PPM</th>
<th>Behavior</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silica Sand</td>
<td>ACGIH</td>
<td></td>
<td></td>
<td>0,025</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A2 – Suspected Human Carcinogen; Lung Cancer; Pulmonary Fibrosis</td>
</tr>
</tbody>
</table>

Appropriate Engineering Controls: N.A.

8.2. Individual Protection Measures

Eye protection: Use close fitting safety goggles, don’t use eye lens.
Protection for skin: Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.
Protection for hands: Use protective gloves that provide comprehensive protection, e.g. P.V.C., neoprene or rubber.
Respiratory protection: Use adequate protective respiratory equipment.
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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance and color</td>
<td>Paste beige</td>
</tr>
<tr>
<td>Odor</td>
<td>Slightly latex-like</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N.A.</td>
</tr>
<tr>
<td>pH</td>
<td>N.A.</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Melting Point</td>
<td>N.A.</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N.A.</td>
</tr>
<tr>
<td>Initial Boiling Point/Boiling Range</td>
<td>N.A.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 212 °F (100 °C); Notes: Closed Cup Method (Closed Cup)</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>N.A.</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>N.A.</td>
</tr>
<tr>
<td>Lower Flammable Limit</td>
<td>N.A.</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>N.A.</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>N.A.</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&gt; 1.0</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N.A.</td>
</tr>
<tr>
<td>Relative Density</td>
<td>N.A.</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Solubility in Oil</td>
<td>N.A.</td>
</tr>
<tr>
<td>Partition Coefficient (N-Octanol/Water)</td>
<td>N.A.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N.A.</td>
</tr>
<tr>
<td>Explosive Limits</td>
<td>N.A.</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>N.A.</td>
</tr>
<tr>
<td>Solid/Gas Flammability</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

9.2. Other Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substance Groups Relevant Properties</td>
<td>N.A.</td>
</tr>
<tr>
<td>Miscibility</td>
<td>N.A.</td>
</tr>
<tr>
<td>Fat Solubility</td>
<td>N.A.</td>
</tr>
<tr>
<td>Conductivity</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Stable under normal conditions.

10.2. Chemical Stability: Data not available.

10.3. Possibility of Hazardous Reactions: None.

10.4. Conditions to Avoid: Stable under normal conditions.

10.5. Incompatible Materials: None in particular.

10.6. Hazardous Decomposition Products: None.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

11.2. Information on Toxicological Effects - Ingredient(s)

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyurethane prepolymer</td>
<td>a) acute toxicity</td>
<td>LD50 Skin Rabbit = 2031mg/kg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LD50 Oral Rat = 580mg/kg</td>
</tr>
</tbody>
</table>
11.3. If not differently specified, the information required in the regulation and listed below must be considered as N.A.

a) acute toxicity
b) skin corrosion/irritation
c) serious eye damage/irritation
d) respiratory or skin sensitization
e) germ cell mutagenicity
f) carcinogenicity
g) reproductive toxicity
h) STOT-single exposure
i) STOT-repeated exposure
j) aspiration hazard

Substance(s) listed on the IARC Monographs: Silica Sand; Group 1
Substance(s) listed as OSHA Carcinogen(s): Silica Sand
Substance(s) listed as NIOSH Carcinogen(s): Silica Sand
Substance(s) listed on the NTP report on Carcinogens: Silica Sand

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment. Eco-Toxicological Information:

**List of components with eco-toxicological properties**

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Component</th>
<th>Identification number</th>
<th>Ecotox Infos</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 %</td>
<td>Silica Sand</td>
<td>CAS: 14808-60-7 LC50</td>
<td>a) Aquatic acute toxicity carp &gt; 10000,00000mg/L 72h</td>
</tr>
</tbody>
</table>
| 0.1-1 %  | Nonylphenol | CAS: 25154-52-3 LC50  | a) Aquatic acute toxicity Fish Pimephales promelas = 135mg/L 96h  
                      EC50  a) Aquatic acute toxicity Daphnia magna = 14mg/L 48h IUCLID  
                      EC50  a) Aquatic acute toxicity Algae Pseudokirchneriella subcapitata = 41mg/L 96h IUCLID  
                      EC50  a) Aquatic acute toxicity Algae Desmodesmus subspicatus = 13mg/L 72h IUCLID |

#### 12.2. Persistence and Degradability

N.A.

#### 12.3. Bioaccumulative Potential

N.A.

#### 12.4. Mobility in Soil

N.A.

#### 12.5. Other Adverse Effects

N.A.

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

Waste must be handled in accordance with all federal, state, provincial, and local regulations. Consult authorities before disposal.

### SECTION 14: TRANSPORT INFORMATION

#### 14.1. UN number

- ADR-UN number: N/A
- DOT-UN Number: N/A
- IATA-Un number: N/A
14.2. UN proper shipping name
ADR-Shipping Name: N/A
DOT-Proprietary Shipping Name: N/A
IATA-Technical name: N/A
IMDG-Technical name: N/A

14.3. Transport hazard class(es)
ADR-Class: N/A
DOT-Hazard Class: N/A
IATA-Class: N/A
IMDG-Class: N/A

14.4. Packing group
ADR-Packing Group: N/A
DOT-Packing group: N/A
IATA-Packing group: N/A
IMDG-Packing group: N/A

14.5. Environmental hazards
Marine pollutant: No
Environmental Pollutant: N.A.

14.6. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N.A.

14.7. Special precautions
Department of Transportation (DOT):
DOT-Special Provision(s): N/A
DOT-Label(s): N/A
DOT-Symbol: N/A
DOT-Cargo Aircraft: N/A
DOT-Passenger Aircraft: N/A
DOT-Bulk: N/A
DOT-Non-Bulk: N/A

Road and Rail (ADR-RID):
ADR-Label: N/A
ADR-Hazard identification number: N/A
ADR-Tunnel Restriction Code: N/A

Air (IATA):
IATA-Passenger Aircraft: N/A
IATA-Cargo Aircraft: N/A
IATA-Label: N/A
IATA-Sub risk: N/A
IATA-Erg: N/A
IATA-Special Provisions: N/A

Sea (IMDG):
IMDG-Stowage Code: N/A
IMDG-Stowage Note: N/A
IMDG-Sub risk: N/A
IMDG-Special Provisions: N/A
IMDG-Page: N/A
IMDG-Label: N/A
IMDG-EMS: N/A
IMDG-MFAG: N/A
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SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations
15.1.1. TSCA - Toxic Substances Control Act
TSCA inventory: All the components are listed on the TSCA inventory

<table>
<thead>
<tr>
<th>TSCA listed substances:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Epoxy Resin</td>
<td>is listed in TSCA</td>
</tr>
<tr>
<td>o-Cresylglycidyl ether</td>
<td>is listed in TSCA</td>
</tr>
<tr>
<td>Silica Sand</td>
<td>is listed in TSCA</td>
</tr>
<tr>
<td>Nonylphenol</td>
<td>is listed in TSCA</td>
</tr>
</tbody>
</table>

15.1.2. SARA - Superfund Amendments and Reauthorization Act
Section 302 - Extremely Hazardous Substances: no substances listed
Section 304 - Hazardous substances: no substances listed
Section 313 - Toxic chemical list: no substances listed

15.1.3. CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
Substance(s) listed under CERCLA: no substances listed

15.1.4. CAA - Clean Air Act
CAA listed substances: Nonylphenol is listed in CAA Section 112(b) – HON

15.1.5. CWA - Clean Water Act
CWA listed substances: no substances listed

15.2. US State Regulations
15.2.1. California Proposition 65
Substance(s) listed under California Proposition 65: Silica Sand; Listed as carcinogen

15.2.2. Massachusetts Right to know
Substance(s) listed under Massachusetts Right to know: Silica Sand, Nonylphenol

15.2.3. Pennsylvania Right to know
Substance(s) listed under Pennsylvania Right to know: Silica Sand, Nonylphenol

15.2.4. New Jersey Right to know
Substance(s) listed under New Jersey Right to know: Silica Sand

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date: 05/25/2015
Product Code: 2111
Other Information: This document has been prepared in accordance with the SDS requirements of the OSHA

GHS Full Text Phrases:

- **H302** Harmful if swallowed.
- **H314** Causes severe skin burns and eye damage.
- **H315** Causes skin irritation.
- **H317** May cause an allergic skin reaction.
- **H319** Causes serious eye irritation.
- **H341** Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- **H341.A** Suspected of causing genetic defects if inhaled.
- **H350.A** May cause cancer if inhaled.
- **H361** Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.
- **H361.A** Suspected of damaging fertility or the unborn child if inhaled.
- **H372.A** Causes damage to organs through prolonged or repeated exposure if inhaled.
- **H400** Very toxic to aquatic life.
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<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H411</td>
<td>Toxic to aquatic life with long lasting effects.</td>
</tr>
<tr>
<td>H412</td>
<td>Harmful to aquatic life with long lasting effects.</td>
</tr>
</tbody>
</table>

Additional classification information:

**HMIS**
- Health: 1 = Slight
- Flammability: 1 = Combustible if heated
- Reactivity: 0 = Minimal
- P.P.E.: Safety glasses, gloves, vapor respirator

**NFPA**
- Health: 1 = Slight
- Flammability: 1 = Combustible if heated
- Reactivity: 0 = Minimal
- Special Risk: NONE

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. The information herein is presented in good faith and believed to be accurate as of the effective date given. It is the buyer's responsibility to ensure that its activities comply with Federal, State/provincial, and local laws.

This document was prepared by a competent person who has received appropriate training. It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended. This SDS cancels and replaces any preceding release.

**Legend to abbreviations and acronyms used in the safety data sheet:**
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
- RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
- IATA: International Air Transport Association.
- IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
- ICAO: International Civil Aviation Organization.
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
- GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
- CLP: Classification, Labeling, Packaging.
- EINECS: European Inventory of Existing Commercial Chemical Substances.
- CAS: Chemical Abstracts Service (division of the American Chemical Society).
- GefStoffVO: Ordinance on Hazardous Substances, Germany.
- LC50: Lethal concentration, for 50 percent of test population.
- LD50: Lethal dose, for 50 percent of test population.
- DNEL: Derived No Effect Level.
- PNEC: Predicted No Effect Concentration.
- TLV: Threshold Limiting Value.
- TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
- STEL: Short Term Exposure limit.
- STOT: Specific Target Organ Toxicity.
- WGK: German Water Hazard Class.
- KSt: Explosion coefficient.
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Party Responsible for the Preparation of This Document
nora systems, Inc.
T 800-332-NORA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

North America GHS US 2012 & WHMIS 2