



# SAFETY DATA SHEET

Page 1 of 5

Date Prepared: May 1, 2015

## 1. Product and Company Identification

NRI Inc.  
3875 Fiscal Court, Ste #100  
Riviera Beach, FL 33404  
Phone: 561-683-6992 Fax: 561-683-8366

Product Name: D400  
Product Type: Rubber Gel  
Product Description: Black Rubber  
General Use : Injectable Rubber Sealant

## 2. Hazards Identification

**GHS Classification :** Eye Irritation, 2B

**GHS Label Elements :**

Signal Word : Warning



### **Hazards Statements:**

H315 / 320 May cause Skin and Eye Irritation  
H335 May cause slight respiratory irritation

### **Precautionary Statements :**

P261 Avoid breathing vapors  
P262 Do not get in eyes, on skin, or on clothing  
P285 In case of inadequate ventilation (heated vapors) wear respiratory protection  
P281 Use personal protective equipment as required  
P301/P310 If Swallowed: Immediately call a Poison Center or Physician  
P333/P313 If skin irritation develops: Get medical attention.  
P302/P352 If on skin: Wash with plenty of soap and water  
P305/P351/P338 If in eyes : Rinse cautiously with water for several minutes.  
Remove contact lenses if easy to do. Continue Rinsing.  
P337/P313 If eye irritation persists: Get medical attention  
P342/P311 If experiencing respiratory symptoms: Get medical attention.  
P233 Keep container tightly closed  
P501 Dispose of observing all Federal, State and Local regulations.

**EMERGENCY OVERVIEW :** This product as shipped is not anticipated to present a significant threat to human health or the environment.

**3. Composition / Information on Ingredients**

Ingredients	CAS No.	% by weight
Methyltriacetoxysilane	4253-34-3	1-20
Octamethylcyclotetrasiloxane	556-67-2	1-20
Ethyltriacetoxysilane	17689-77-9	1-20
Silica , Amorphous (Silica Gel)	7631-86-9	1-20
Dimethyl siloxane, hydroxyl-terminated	70131-67-8	70-90
Hydrotreated middle petroleum distillates	64742-46-7	<8

**4. First Aid Measures**

Ingestion: DO NOT INGEST. Oral toxicity not determined.  
Call a physician or get medical help immediately.

Inhalation: Remove to fresh air. If symptoms persist,  
seek medical attention.

Skin Contact: Wash with soap and water, consult physician if  
irritation develops.

Eye Contact: Flush with water 15 minutes. If symptoms persist,  
seek medical attention.

**5. Fire Fighting Measures**

Recommended Extinguishing Agent:  
Foam, Dry Chemical, Carbon Dioxide, Water Fog

Special Fire Fighting Procedures:  
Self contained breathing apparatus and protective clothing  
should be worn in fighting fires involving chemicals.  
(Professionally Trained Personnel).

Hazardous Products Formed by Fire  
or Thermal Decomposition:  
CO<sub>2</sub>, traces of incompletely burned carbon compounds, Silicon dioxide, Formaldehyde

Unusual Fire or Explosion Hazards: None

Compressed Gases: None

Pressure at Room Temperature: Does not apply

**6. Accidental Release Measures**

Steps to be taken in cases of  
spill or leak:  
Wear proper personal protective equipment. Remove any sources of  
ignition from the area and allow hot surfaces to cool. Return  
uncontaminated material to container and seal container tightly.  
May present a slip hazard, clean up as appropriate.  
Dispose of contaminated material or waste.

**7. Handling and Storage**

Storage: Cool, dry, storage. Store in closed containers.

Handling: Avoid contact with skin and eyes. Do not breathe heated vapors. This  
product in its purchased form does not create an inhalation hazard  
from fibers or dust. If grinding or sanding or any other process is  
performed to this compound when cured, will cause airborne particles wear  
appropriate respirator to avoid breathing any dust or vapors.  
Wear appropriate safety gear as required in work area.

**8. Exposure Controls / Personal Protection**

Exposure Limits Ingredients	ACGIH (TLV)	OSHA ( PEL)	OTHER
Methyltriacetoxysilane	See acetic acid comment below		
Octamethylcyclotetrasiloxane	Not Established	Not Established	
Ethyltriacetoxysilane	See acetic acid comment below		
Silica , Amorphous	10 mg/m3 TWA (total dust)*		
	* silica gel, much less toxic than crystalline forms, does not cause silicosis.		
Dimethyl siloxane, hydroxyl-terminated	Not Established	Not Established	
Hydrotreated middle petroleum distillates	5mg/m3	5mg/m3	

**Items below are not ingredients but possible by-products:**

Acetic Acid

Comment : Acetic Acid is formed upon contact with water or humid air, provide adequate ventilation to control exposure guidelines of :

10 ppm TWA	10 ppm TWA
15 ppm STEL	

Formaldehyde (When heated to temperatures above 150 C in the presence of open air, product can form formaldehyde vapors.)  
Formaldehyde is a potential cancer causer and a known skin and respiratory sensitizer.

Formaldehyde	1 ppm TWA	.75 ppm TWA
		2 ppm STEL

**Personal Protective Equipment (PPE)**

Eyes: Safety Glasses

Skin: Work gloves.

Respiratory Protection: NIOSH approved for organic vapors and dust if needed.

**Other Protective Clothing or Equipment:**

Coveralls or other protective clothing. Safety equipment as required in area.

**Work / Hygienic Practices:**

Avoid contact with skin. Wash hands before eating.

Engineering Controls : Ventilation: Local exhaust if poorly ventilated area or in confined spaces.

General ventilation recommended.

**9. Chemical and Physical Properties**

Appearance: Black Rubber Gel  
 Odor: Vinegar Odor  
 pH: 5.9  
 Solubility in Water: NIL  
 Specific Gravity: 1.06 (H<sub>2</sub>O =1)  
 Evaporation Rate: Not Applicable  
 Boiling Point: Not Applicable  
 Melting Point: Not Applicable  
 Vapor Pressure: Not Applicable  
 Vapor Density: Not Established  
 VOC Content: (VOL) 0.25% (m)  
 Flash Point: over 212<sup>0</sup> F. Method: Closed Cup

**Flammable Limits:**

LEL: Not Established

UEL: Not Established

**10. Stability and Reactivity**

Stability: Stable  
 Hazardous Polymerization: Will not occur  
 Hazardous Decomposition  
 Or By-Products: CO<sub>2</sub>, traces of incompletely burned carbon compounds, Silicon dioxide, Formaldehyde  
 Incompatibility: Strong Oxidizers and Some Acids

**11. Toxicology Information**

Primary Routes of Entry: Inhalation and contact.  
Signs and Symptoms of Overexposure: **Inhalation:** respiratory irritation.  
**Eyes:** Irritation.  
**Skin:** Possible irritation with prolonged contact.

Existing Conditions Aggravated by Exposure: Pre-existing skin condition if prolonged exposure to skin. (Wear chemical resistant gloves)

**Carcinogenicity**

NTP: None  
IARC: None  
OSHA Regulated: NO

Toxicity : When heated to temperatures above 150 C in the presence of open air, product can form formaldehyde vapors. Formaldehyde is a potential cancer causer and a known skin and respiratory sensitizer.

Acute Health Hazards: **Skin:** Possible irritation with prolonged contact.  
**Inhalation:** Irritation from vapors.

Chronic Health Hazards: **Eyes:** Irritation.  
None Known

**12. Ecological Information**

No information is available.

**13. Disposal Considerations****Recommended Methods of Disposal:**

RCRA 40 CFR 261 Classification : This product as purchased does not fall under current US EPA RCRA definitions of Hazardous Waste.

Certain state regulations could affect whether a material is considered a hazardous waste upon disposal. It must also be noted that a material can become a hazardous waste if it is mixed with or comes in contact with a hazardous substance during use. Under RCRA it is the responsibility of user of a product to determine at the time of disposal, whether a material should be classified as a hazardous waste.

**14. Transport Information**

DOT (49 CFR 172): Not Regulated

IATA : Not Regulated

Liquid / Solid (per ASTM D 4359-90) : Material is a solid

**15. REGULATORY INFORMATION**

CERCLA HAZARDOUS SUBSTANCES (40 CFR Part 302.4): This product is not reportable under 40 CFR Part 302.4.

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR Part 355): This product does not contain any SARA 302 Extremely Hazardous Substances. NOTE : Formaldehyde (When heated to temperatures above 150 C in the presence of open air, product can form formaldehyde vapors.)

SARA TITLE III SECTION 311/312 HAZARDOUS CATEGORIZATION (40 CFR Part 370): Certain ingredients of this product are regulated under Sara Title III Section 311/312, see section 3 of this MSDS.

SARA TITLE III SECTION 313 (40 CFR Part 372): None NOTE : Formaldehyde (When heated to temperatures above 150 C in the presence of open air, product can form formaldehyde vapors.)

U.S. INVENTORY (TSCA): Any chemical substances (as defined in 40 CFR Part 710.2), that are contained in, or used in the manufacture of this product, are reported in the EPA TSCA Inventory. (As required per 40 CFR 710.3)

CALIFORNIA PROPOSITION 65: Formaldehyde (When heated to temperatures above 150 C in the presence of open air, product can form formaldehyde vapors.) **Not an ingredient, but a possible by-product**

EUROPEAN UNION : Silica, Amorphous: CLP STOT SE3, Ethyltriacetoxysilane : CLP Acute Tox 4 Skin Corr. 1B, Methyltriacetoxysilane : CLP Acute Tox 4, Skin Corr.1B, Octamethylcyclotetrasiloxane: CLP Repr. 2, Aquatic Chronic 4, Dimethyl siloxane, hydroxyl-terminated : CLP, Eye Irrit 2, Skin Irrit. 2, Hydrotreated middle petroleum distillates: CLP Asp Tox 1

**Items below are not ingredients but possible by-products:**

Formaldehyde (When heated to temperatures above 150 C in the presence of open air, product can form formaldehyde vapors.) : CLP Acute Tox 3, Carc.2, Acetic Acid (formed during curing on exposure to water, moisture, or humid air.) : CLP Flam Liq 3, Skin Corr 1A

CANADA WHMIS: Ingredient Disclosure List : Formaldehyde (When heated to temperatures above 150 C in the presence of open air, product can form formaldehyde vapors.) Acetic Acid (formed during curing on exposure to water, moisture, or humid air.) Silica, amorphous fumed. form formaldehyde vapors.) **Not an ingredient, but a possible by-product**

OZONE DEPLETERS: \* This product is not manufactured with or contains any Class I or Class II Ozone Depleting Chemicals. (ODC's)

**16. OTHER INFORMATION**

The information contained in this MSDS sheet is based upon data supplied by our suppliers and data determined by us in our facilities at the time these products were formulated. We have reviewed any information that we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety data in this sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. If after reviewing this MSDS you have determined that this product poses unusual risks to you, your plant, or your plant personnel, or if you cannot comply fully with all safety recommendations, do not use this product. This product is intended for a temporary repair. The responsibility for whether or not the product is suitable for use rest solely with the purchaser. We recommend that the product be tested prior to use. Your use of this information is beyond our control, therefore, the information is provided without warranty expressed or implied. We accept no liability beyond the purchase price of the material.

Estimated HMIS® Code:

Health Hazard:	2
Flammability Hazard:	1
Physical Hazard:	0

Personal Protection: NPCA recommends that PPE codes be determined by the employer, who is familiar with the actual conditions under which chemicals in the facility are used.

**Procedure Warning:****Attn: Technician**

(For industrial use by professionally trained personnel only) If being injected, steps should be taken to insure that the injection pressure in conjunction with pressure that may occur from gassing off of the compound does not exceed the pressure limitations of the piping system. If the compound is gassing off, gasses should be vented. Also, be aware it is quite common that the application temperature will exceed the compound flash point. Be aware of the possibility of a flash and take necessary precautions. See section 8 of SDS for personal protective equipment. Ventilation may be needed during heating/curing stage to exhaust organic vapors resulting from vaporization of certain organic agents. Always avoid direct contact with heated vapors being emitted from the compound. These vapors may be irritating to the skin, eyes and respiratory system. Read product technical data and safety information before use.

**PREPARATION INFORMATION**

Prepared By:	Safety Department
Company:	NRI Inc. 05-01-14
Revision Date:	Revision: C