



# nora ED MR90 Adhesive

## Safety Data Sheet

acc. to OSHA 29 CFR 1910.1200

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances:

- Not applicable

Mixture:

Chemical name	CAS No	Weight-%
Graphite	7782-42-5	10 - 30
Quaternary ammonium compounds, ethyldimethylsoya alkyl, Et sulfates	7782-42-5	1 - <5
Quartz	14808-60-7	1 - <5

*\*The exact percentage (concentration) of composition has been withheld as a trade secret*

### SECTION 4: FIRST-AID MEASURES

Description of first aid measures:

- General advice: Show this safety data sheet to the doctor in attendance.
- Inhalation: Remove to fresh air. Get medical attention immediately if symptoms occur.
- Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
- Skin contact: Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
- Ingestion: Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician.
- Self-protection of the first aider: Avoid contact with skin, eyes, or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed:

- Symptoms: May cause redness and tearing of the eyes. Burning sensation.

Indications of any immediate medical attention and special treatment needed:

- Note to physicians: Treat symptomatically.

### SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:

- Suitable Extinguishing Media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Large Fire: CAUTION: Use of water spray when fighting fire may be inefficient.
- Unsuitable extinguishing media: Do not scatter spilled material with high pressure water streams.

Special hazards arising from the substance or mixture:

- Specific hazards arising from the chemical: No information available.
- Hazardous combustion products: Silicon dioxide.

Explosion data:

- Sensitivity to mechanical impact: None.
- Sensitivity to static discharge: None.

Advice for firefighters:

- Special protective equipment for fire-fighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

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### SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

- Personal precautions: Use personal protective equipment as required. Ensure adequate ventilation. Avoid contact with skin, eyes, or clothing. Wash thoroughly after handling.
- Other information: Refer to protective measures listed in Section 7 and 8.

Environmental precautions:

- Environmental precautions: See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up:

- Methods for containment: Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
- Methods for cleaning up: Use personal protective equipment as required. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

Reference to other sections: See section 8 for more information. See section 13 for more information.

### SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

- Advice on safe handling: Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke when using this product. Ensure adequate ventilation. Avoid contact with skin, eyes, or clothing. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities:

- Storage Conditions: Keep containers tightly closed in a dry, cool, and well-ventilated place.
- Recommended storage temperature: Keep at temperatures between 41 and 95 °F / 5 and 35 °C.

References to other sections: Section 10: STABILITY AND REACTIVITY. Section 13: DISPOSAL CONSIDERATIONS.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

- Exposure Limits: This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Graphite 7782-42-5	TWA: 2 mg/m <sup>3</sup> respirable particulate matter all forms except graphite fibers	TWA: 15 mg/m <sup>3</sup> total dust synthetic TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic (vacated) TWA: 2.5 mg/m <sup>3</sup> respirable dust natural (vacated) TWA: 10 mg/m <sup>3</sup> total dust synthetic (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction synthetic TWA: 15 mppcf natural	IDLH: 1250 mg/m <sup>3</sup> TWA: 2.5 mg/m <sup>3</sup> natural respirable dust
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter	TWA: 50 µg/m <sup>3</sup> TWA: 50 µg/m <sup>3</sup> excludes construction work, agricultura operations, and exposures that result from	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust

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		<p>the processing of sorptive clays (vacated)</p> <p>TWA: 0.1 mg/m<sup>3</sup></p> <p>respirable dust: (250)/(%SiO<sub>2</sub> + 5) mppcf</p> <p>TWA respirable fraction: (10)/(%SiO<sub>2</sub> + 2) mg/m<sup>3</sup></p> <p>TWA respirable fraction</p>	
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Chemical name	Argentina	Brazil	Chile	Colombia
Graphite 7782-42-5	TWA: 2mg/m <sup>3</sup>	TWA: 2mg/m <sup>3</sup>	2 mg/m <sup>3</sup> TWA (all forms except graphite fibers, respirable particulate matter)	TWA: 2 mg/m <sup>3</sup>
Quartz 14808-60-7	TWA: 0.025mg/m <sup>3</sup>	TWA: 0.05mg/m <sup>3</sup>	0.025 mg/m <sup>3</sup> TWA (respirable particulate matter)	TWA: 0.025 mg/m <sup>3</sup>

### Exposure controls:

#### Appropriate engineering controls:

- Engineering controls: Showers, Eyewash stations, Ventilation systems.

#### Individual protection measures, such as personal protective equipment:

- Eye/face protection: Tight sealing safety goggles. Avoid contact with eyes. If splashes are likely to occur. Face protection shield.
- Hand protection: Wear suitable gloves. Impervious gloves.
- Skin and body protection: Wear suitable protective clothing. Long sleeved clothing.
- Respiratory protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
- General hygiene considerations: Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink, or smoke when using this product. Avoid contact with skin, eyes, or clothing. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties:

- Physical state: Liquid
- Appearance: Dispersion
- Color: Black
- Odor: Odorless
- Odor: Not applicable

Property	Values	Remarks / Method
pH	9	
pH (as aqueous solution)	No data available.	None known.
Melting point / freezing point	No data available.	None known.

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Initial boiling point and boiling range	No data available.	None known.
Flash point	No data available.	None known.
Evaporation rate	No data available.	None known.
Flammability	Not applicable for liquids.	
Flammability Limit in Air		None known.
Upper flammability or explosive limits	No data available.	
Lower flammability or explosive limits	No data available.	
Vapor pressure	No data available.	None known.
Relative vapor density	No data available.	None known.
Water solubility	Soluble in water.	
Solubility(ies)	No data available.	None known.
Partition coefficient	No data available.	None known.
Autoignition temperature	No data available.	None known.
Decomposition temperature	No data available.	None known.
Kinematic viscosity	No data available.	None known.
Dynamic viscosity	48000 mPa s.	

Other information:

- Explosive properties: No information available.
- Oxidizing properties: No information available.
- Solvent content (%): No information available.
- Solid content (%): 68
- Softening Point: No information available.
- Molecular weight: No information available.
- VOC Content (%): 0% No Information available.
- Density: 8.57 LB/GAL
- Bulk density: No information available.

## SECTION 10: STABILITY AND REACTIVITY

Reactivity: No information available.

Chemical stability: Stable under normal conditions.

Possibility of hazardous reactions: None under normal processing.

Conditions to avoid: None known based on information supplied.

Incompatible materials: Strong acids. Strong bases. Strong oxidizing agents.

Hazardous decomposition products: None known based on information supplied.

## SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects:

- Inhalation: Based on available data, the classification criteria are not met.
- Eye contact: Specific test data for the substance or mixture is not available. Causes serious eye irritation (based on components). May cause redness, itching, and pain.
- Skin contact: Specific test data for the substance or mixture is not available. Causes skin irritation (based on components).
- Ingestion: Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

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Symptoms related to the physical, chemical, and toxicological characteristics:

- Symptoms: Redness. May cause redness and tearing of the eyes.

Acute toxicity: Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document: ATEmix (oral) 31,466.30 mg/kg

Component Information:

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Graphite 7782-42-5	-	-	>2000 mg/m <sup>3</sup> (Rattus) 4 h
Quartz 14808-60-7	>2000 mg/kg (Rattus)	-	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

- Skin corrosion/irritation: Classification based on data available for ingredients. Irritating to skin.
- Serious eye damage/eye irritation: Classification based on data available for ingredients. Causes serious eye irritation.
- Respiratory or skin sensitization: Based on available data, the classification criteria are not met.
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met. As Quartz (14808-60-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Quartz 14808-60-7	A2	Group 1	Known	X

Legend:

ACGIH (American Conference of Governmental Industrial Hygienists)

*A2 - Suspected Human Carcinogen*

IARC (International Agency for Research on Cancer)

*Group 1 - Carcinogenic to Humans*

NTP (National Toxicology Program)

*Known - Known Carcinogen*

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

*X - Present*

- Reproductive toxicity: Based on available data, the classification criteria are not met.
- STOT - single exposure: Based on available data, the classification criteria are not met.
- STOT - repeated exposure: Based on available data, the classification criteria are not met.
- Target organ effects: Respiratory system, Eyes, Central Vascular System (CVS), Lungs.
- Aspiration hazard: Based on available data, the classification criteria are not met.
- Other adverse effects: No information available.
- Interactive effects: No information available.

## SECTION 12: ECOLOGICAL INFORMATION

Toxicity:

- Ecotoxicity

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Persistence and degradability: No information available.

Bioaccumulative potential:

- Bioaccumulation: There is no data for this product.
- Component Information:

Mobility in soil: No information available.

Other adverse effects: No information available.

## SECTION 13: DISPOSAL CONSIDERATIONS

Waste treatment methods:

- Waste from residues/unused products: It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.
- Contaminated packaging: Dispose of in accordance with federal, state, and local regulations.

## SECTION 14: TRANSPORT INFORMATION

DOT: Not regulated.

IATA: Not regulated.

IMDG: Not regulated.

## SECTION 15: REGULATORY INFORMATION

International Inventories:

TSCA	Listed
DSL	Not listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

Listed - The components of this product are either listed or exempt from listing on inventory.

Not Listed - One or more components of this product are not listed on inventory.

US Federal Regulations:

SARA 313:

- Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories:

- Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

Europe:

- Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU: This product does not contain Lead, Cadmium, Mercury, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-Ethylhexyl) phthalate (DEHP), Benzyl butyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) above the regulated limit mentioned in this regulation. This document is based on the information given to us by our own suppliers at the date of this document.

SVHC:

- Substances of Very High Concern for Authorization: This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59).

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### SECTION 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet:

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value \* Skin designation

Contact: see Responsible Party

Revision date: 04/18/2022

Revision note: No information available.

Disclaimer: The information provided 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 a guidance for 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 text.

End of Safety Data Sheet