



Safety Data Sheet Nuclear Grade Anti-Seize

Revision Date: 07/13/2016

1. Identification

1.1. Product identifier

Product Identity

Nuclear Grade Anti-Seize

Alternate Names

NM-91® Anti-Seize (Nuclear Grade)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended Use / Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

Lub-O-Seal Company Inc.
17519 Lewis Drive
Cypress, TX 77433

Customer Service: Lub-O-Seal Company Inc.

+01-281-373-0387

24 hour Emergency Telephone No.

Chemtel:
North America Toll Free: 1-800-255-3924
International: +01-813-248-0585

2. Hazard(s) identification

2.1. Classification of the substance or mixture

No applicable GHS categories.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.

No applicable GHS categories.

[Prevention]:

No GHS prevention statements

[Response]:

No GHS response statements

[Storage]:

No GHS storage statements

[Disposal]:

No GHS disposal statements



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3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

| Ingredient/Chemical Designations | Weight % | GHS Classification | Notes |
|--|----------|--------------------|--------|
| Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified CAS Number: 0064742-52-5 | 50 - 75 | Asp. Tox. 1;H304 | [1] |
| Calcined Kaolin CAS Number: 0066402-68-4 | 25 - 50 | Not Classified | [1] |
| Graphite CAS Number: 0007782-42-5 | 10 - 25 | Not Classified | [1][2] |
| TALC (Mg ₃ H ₂ (SiO ₃) ₄) CAS Number: 0014807-96-6 | 5 - 10 | Not Classified | [1][2] |
| Petroleum Oil CAS Number: 0064742-58-1 | 1 - 5 | Not Classified | [1] |

In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

| | |
|-------------------|---|
| General | In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. |
| Inhalation | Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth. |
| Eyes | Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention. |
| Skin | Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser. |
| Ingestion | If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting. |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|-----------------|--|
| Overview | <u>Skin:</u> Prolonged or repeated exposure can cause irritation and dermatitis. <u>Eyes:</u> Eye irritant. May cause redness, tearing and blurred vision <u>Inhalation:</u> Not expected <u>Ingestion:</u> May cause nausea, vomiting or diarrhea. |
|-----------------|--|



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5. Fire-fighting measures

5.1. Extinguishing media

Dry chemical, foam, CO₂, water.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Carbon monoxide

5.3. Advice for fire-fighters

Fire may produce dense smoke, firefighters should wear self contained breathing apparatus.
Use water to cool fire-exposed containers, containers heated by fire can support combustion

ERG Guide No. ----

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Mop up or otherwise absorb and hold for disposal.

7. Handling and storage

7.1. Precautions for safe handling

Use good personal hygiene practices

7.2. Conditions for safe storage, including any incompatibilities

Keep out of reach of children. Store in a cool, dry location. Do not store near open flame or sparks. Keep container closed during storage. For institutional use only.

Incompatible materials: Strong oxidizers, concentrated oxygen.

7.3. Specific end use(s)

No data available.



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8. Exposure controls and personal protection

8.1. Control parameters

Exposure

| CAS No. | Ingredient | Source | Value |
|--------------|---|----------|--|
| 0007782-42-5 | Graphite | OSHA | TWA 15 mg/m ³ TWA 15 mppcf |
| | | ACGIH | TWA: 2 mg/m ³ |
| | | NIOSH | TWA 2.5 mg/m ³ (resp) |
| | | Supplier | No Established Limit |
| 0014807-96-6 | TALC (Mg ₃ H ₂ (SiO ₃) ₄) | OSHA | TWA 20 mppcf |
| | | ACGIH | Containing asbestos fibres TWA: 0.1 f/cc (K) A1, 1Containing no asbestos fibres TWA:2 mg/m ³ (E) (respirable) |
| | | NIOSH | TWA 2 mg/m ³ (resp) |
| | | Supplier | No Established Limit |
| 0064742-52-5 | Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0064742-58-1 | Petroleum Oil | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |
| 0066402-68-4 | Calcined Kaolin | OSHA | No Established Limit |
| | | ACGIH | No Established Limit |
| | | NIOSH | No Established Limit |
| | | Supplier | No Established Limit |

Contains mineral oil. The exposure limits for oil mist are 5 mg/m³ OSHA PEL and 10 mg/m³ ACGIH.

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|---|--------|---|
| 0007782-42-5 | Graphite | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0014807-96-6 | TALC (Mg ₃ H ₂ (SiO ₃) ₄) | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: Yes; Group 3: No; Group 4: No; |
| 0064742-52-5 | Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0064742-58-1 | Petroleum Oil | OSHA | Select Carcinogen: No |



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| | | | |
|--------------|-----------------|------|--|
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |
| 0066402-68-4 | Calcined Kaolin | OSHA | Select Carcinogen: No |
| | | NTP | Known: No; Suspected: No |
| | | IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No; |

8.2. Exposure controls

| | |
|-----------------------------|---|
| Respiratory | If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators. |
| Eyes | Safety glasses or face shield if method of dispensing promotes splashing. |
| Skin | Safety gloves are recommended. |
| Engineering Controls | Local exhaust suggested. |
| Other Work Practices | Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse. |

9. Physical and chemical properties

| | |
|--|--|
| Appearance | Black Paste |
| Odor | Hydrocarbon |
| Odor threshold | Not determined |
| pH | Not Measured |
| Melting point / freezing point | Not Measured |
| Initial boiling point and boiling range | 600°F |
| Flash Point | > 450°F (TCC) |
| Evaporation rate (Ether = 1) | < 1 |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured |
| Vapor pressure (Pa) | < 10 |
| Vapor Density | > 1 |
| Specific Gravity | 1.05 |
| Solubility in Water | Not Measured |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Not Measured |
| Decomposition temperature | Not Measured |
| Viscosity (cSt) | Not Measured |
| % Volatile | 0% |
| Texture | Oily Texture |

9.2. Other information



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No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Excessive heat and open flame.

10.5. Incompatible materials

Strong oxidizers, concentrated oxygen.

10.6. Hazardous decomposition products

Carbon monoxide

11. Toxicological information

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

| Ingredient | Oral LD50, mg/kg | Skin LD50, mg/kg | Inhalation Vapor LC50, mg/L/4hr | Inhalation Dust/Mist LC50, mg/L/4hr | Inhalation Gas LC50, ppm |
|--|--------------------------------|-------------------|---------------------------------|-------------------------------------|--------------------------|
| Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified - (64742-52-5) | > 5,000.00, Rat - Category: NA | No data available | No data available | 5.70, Rat - Category: NA | No data available |
| Calcined Kaolin - (66402-68-4) | No data available | No data available | No data available | No data available | No data available |
| Graphite - (7782-42-5) | No data available | No data available | No data available | No data available | No data available |
| TALC (Mg3H2(SiO3)4) - (14807-96-6) | No data available | No data available | No data available | No data available | No data available |
| Petroleum Oil - (64742-58-1) | No data available | No data available | No data available | No data available | No data available |

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate



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was used in the calculation of the product's ATE (Acute Toxicity Estimate).

| Classification | Category | Hazard Description |
|-------------------------------|----------|--------------------|
| Acute toxicity (oral) | --- | Not Applicable |
| Acute toxicity (dermal) | --- | Not Applicable |
| Acute toxicity (inhalation) | --- | Not Applicable |
| Skin corrosion/irritation | --- | Not Applicable |
| Serious eye damage/irritation | --- | Not Applicable |
| Respiratory sensitization | --- | Not Applicable |
| Skin sensitization | --- | Not Applicable |
| Germ cell mutagenicity | --- | Not Applicable |
| Carcinogenicity | --- | Not Applicable |
| Reproductive toxicity | --- | Not Applicable |
| STOT-single exposure | --- | Not Applicable |
| STOT-repeated exposure | --- | Not Applicable |
| Aspiration hazard | --- | Not Applicable |

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

| Ingredient | 96 hr LC50 fish, mg/l | 48 hr EC50 crustacea, mg/l | ErC50 algae, mg/l |
|--|-------------------------------|----------------------------|---|
| Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil-unspecified - (64742-52-5) | 5,000.00, Oncorhynchus mykiss | 1,000.00, Daphnia magna | 1,000.00 (96 hr), Scenedesmus subspicatus |
| Calcined Kaolin - (66402-68-4) | Not Available | Not Available | Not Available |
| Graphite - (7782-42-5) | Not Available | Not Available | Not Available |
| TALC (Mg3H2(SiO3)4) - (14807-96-6) | Not Available | Not Available | Not Available |
| Petroleum Oil - (64742-58-1) | Not Available | Not Available | Not Available |

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.



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12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

| | DOT (Domestic Surface Transportation) | IMO / IMDG (Ocean Transportation) | ICAO/IATA |
|------------------------------------|---------------------------------------|---|---------------------------|
| 14.1. UN number | Not Applicable | Not Regulated | Not Regulated |
| 14.2. UN proper shipping name | Not Regulated | Not Regulated | Not Regulated |
| 14.3. Transport hazard class(es) | DOT Hazard Class: Not Applicable | IMDG: Not Applicable Sub Class: Not Applicable | Air Class: Not Applicable |
| 14.4. Packing group | Not Applicable | Not Applicable | Not Applicable |
| 14.5. Environmental hazards | | | |
| IMDG | Marine Pollutant: No | | |
| 14.6. Special precautions for user | No further information | | |

15. Regulatory information

| | |
|--|---|
| Regulatory Overview | The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented. |
| Toxic Substance Control Act (TSCA) | All components of this material are either listed or exempt from listing on the TSCA Inventory. |
| WHMIS Classification | Not Regulated |
| US EPA Tier II Hazards | Fire: No Sudden Release of Pressure: No Reactive: No Immediate (Acute): No Delayed (Chronic): No |

EPCRA 311/312 Chemicals and RQs:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 302 Extremely Hazardous:



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To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens (>0.0%):

Calcined Kaolin

TALC (Mg₃H₂(SiO₃)₄)

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Graphite

TALC (Mg₃H₂(SiO₃)₄)

Pennsylvania RTK Substances (>1%):

Graphite

TALC (Mg₃H₂(SiO₃)₄)

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H304 May be fatal if swallowed and enters airways.

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