

Safety Data Sheet

acc. to OSHA HCS

Printing date 05/22/2013

Reviewed on 05/22/2013

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** NA-SUL 611
- **Application of the substance / the preparation:** Rust inhibitor for lubricants
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
King Industries, Inc.
Science Road
P.O. Box 588
Norwalk, CT 06852 (USA)
- **Information:**
1-203-866-5551
email: msds@kingindustries.com
- **Emergency telephone number:**
For Chemical Emergency *ONLY* (spill, leak, fire, exposure or accident), 24 hr. Emergency telephone call
Chemtrec: 1-800-424-9300 (US, Canada, Puerto Rico); 1-703-527-3887 (Elsewhere)

2 Hazards identification

- **Classification of the substance or mixture**



GHS07

- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

- **Label elements**

- **Hazard-determining components of labelling:**
barium alkyl-naphthalenesulfonate

- **Risk phrases:**
Harmful by inhalation and if swallowed.
Irritating to skin.

- **Safety phrases:**
Keep container in a well-ventilated place.
Do not breathe gas/fumes/vapour/spray.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Wear suitable protective clothing and gloves.
This material and its container must be disposed of as hazardous waste.

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 2
Fire = 1
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = *2
Fire = 1
Reactivity = 0

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3 Composition/information on ingredients

· **Description:** Mixture of the substances listed below with non-hazardous additions.

· **Dangerous components:**

| | | |
|--------------------------------|--------------------------|--------|
| barium alkylphthalenesulfonate | ⚠ H302; H332; H315; H319 | 45-50% |
|--------------------------------|--------------------------|--------|

· **Additional information:**

In accordance with current OSHA Hazard Communication Standard criteria, this product does not require a cancer hazard warning, as it is formulated with severely hydrotreated, severely solvent extracted, and/or processed by mild hydrotreatment and extracted base stocks.

4 First aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** Immediately call a doctor.

5 Firefighting 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**

Formation of toxic gases is possible during heating or in case of fire.

· **Advice for firefighters**

· **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

· **Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation.

· **Environmental precautions:** Do not allow product to reach sewage system or any water course.

· **Methods and material for containment and cleaning up:**

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

· **Reference to other sections**

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

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7 Handling and storage

- **Handling:**

- **Precautions for safe handling**

Product should be handled in accordance with good Industrial Hygiene and Safety practices. Adequate exhaust ventilation should be provided in work areas. Prevent formation of aerosols.

- **Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Store in tightly sealed original containers in a cool, dry place away from any direct source of heat and moisture. Maximum recommended storage temperature: 46°C (115°F).

- **Information about storage in one common storage facility:**

See "Requirements to be met by storerooms and receptacles"

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:**

barium compounds

| | |
|-----|---|
| PEL | 0.5 mg/m ³ as Ba |
| REL | 0.5 mg/m ³ and soluble compounds, as Ba |
| TLV | 0.5 mg/m ³ as Ba |

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

- **Breathing equipment:** If the above noted exposure limits are exceeded, use a suitable respiratory filter device.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Eye protection:**



Tightly sealed goggles

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· **Body protection:** Impervious protective clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **Appearance:**

| | |
|---------------|----------------|
| Form: | Liquid |
| Color: | Dark brown |
| Odor: | Characteristic |

· **pH-value at 20 °C (68 °F):** 9

· **Flash point:** 165 °C (329 °F) (ASTM D 92, DIN 51376, COC)

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard when handled properly.

· **Density at 15.6 °C (60 °F):** 1.08 g/cm³ (9.013 lbs/gal) (ASTM D 4052)

· **Solubility in / Miscibility with water:**

Soluble in petroleum and synthetic lubricant base stocks and most common solvents. Insoluble in water.

10 Stability and reactivity

· **Reactivity**

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

· **Possibility of hazardous reactions** Reacts with strong acids and alkali.

· **Hazardous decomposition products:**

No dangerous decomposition products known if used according to product recommendations.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **Primary irritant effect:**

· **on the skin:** may be irritating to skin upon prolonged or repeated contact

· **in the eye:** mild eye irritant

· **Sensitization:** no sensitizing effects known in humans

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

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· **NTP (National Toxicology Program)**

None of the ingredients are listed.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** 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 undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach ground water, water course or sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|--|-----------------|
| · UN-Number | |
| · DOT, ADR, ADN, IMDG, IATA | Void |
| · UN proper shipping name | |
| · DOT, ADN, IMDG, IATA | Void |
| · ADR | Void |
| · Transport hazard class(es) | |
| · DOT, ADR, ADN, IMDG, IATA | |
| · Class | NOT REGULATED |
| · DOT, ADR, IMDG, IATA | Void |
| · Environmental hazards: | |
| · Marine pollutant: | No |
| · Special precautions for user | Not applicable. |
| · Poison inhalation hazard: | No |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |

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| · ADR | IF TRANSPORTED IN BULK (e.g., >119 GAL OR 20' ISO TANKS) AT 100 °C: UN 3257, ELEVATED TEMPERATURE LIQUID, N.O.S. (BARIUM ALKYLARYLSULFONATE, PETROLEUM DISTILLATES), PG III |
| · IMDG · Remarks: | IF TRANSPORTED IN BULK (e.g., >119 GAL OR 20' ISO TANKS) AT 100 °C: UN 3257, ELEVATED TEMPERATURE LIQUID, N.O.S. (BARIUM ALKYLARYLSULFONATE, PETROLEUM DISTILLATES), PG III |
| · UN "Model Regulation": | NOT REGULATED |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- SARA

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| · Section 355 (extremely hazardous substances): |
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| None of the ingredients are listed. |
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| · Section 313 (Specific toxic chemical listings): |
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| barium compounds |
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| · Proposition 65 |
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| · Chemicals known to cause cancer: |
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| None of the ingredients are listed. |
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| · Chemicals known to cause reproductive toxicity for females: |
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| None of the ingredients are listed. |
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| · Chemicals known to cause reproductive toxicity for males: |
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| None of the ingredients are listed. |
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| · Chemicals known to cause developmental toxicity: |
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| None of the ingredients are listed. |
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| · Carcinogenity categories |
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| · EPA (Environmental Protection Agency) |
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| barium compounds | D; NL |
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| · TLV (Threshold Limit Value established by ACGIH) |
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| barium compounds | A4 |
|------------------|----|

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| · MAK (German Maximum Workplace Concentration) |
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| None of the ingredients are listed. |
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| · NIOSH-Ca (National Institute for Occupational Safety and Health) |
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| None of the ingredients are listed. |
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| · OSHA-Ca (Occupational Safety & Health Administration) |
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| None of the ingredients are listed. |
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| · Hazard-determining components of labelling: |
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| barium alkylphthalenesulfonate |
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|------------------------|
| · Risk phrases: |
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| |
|---|
| Harmful by inhalation and if swallowed. |
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Irritating to skin.

· **Safety phrases:**

Keep container in a well-ventilated place.

Do not breathe gas/fumes/vapour/spray.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing and gloves.

This material and its container must be disposed of as hazardous waste.

· **National regulations:**

Product is listed or in compliance with: US TSCA, CANADA DSL, EEC EINECS, EEC REACH, AUSTRALIA AICS, CHINA IECSC, JAPAN MITI, KOREA ECL, NEW ZEALAND NZIoC, PHILIPPINES PICCS, TAIWAN ECSI.

* **16 Other information**

To the best of our knowledge, the information contained herein is accurate. However, neither King Industries nor any of its distributors assume any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

· **Department issuing MSDS:** Regulatory

· **Contact:** Romana Uzar

USA