1. PRODUCT AND COMPANY IDENTIFICATION

Product name: PETRO AG SPECIAL POWDER

Chemical name: Sodium alkylnaphthalenesulfonate

Supplier: AKZO NOBEL SURFACE CHEMISTRY LLC
525 West Van Buren Street
Chicago, IL 60607-3823, USA

Emergency telephone number: Akzo Nobel Emergency Response (24 hours) 914-693-6946
CHEMTREC (24 hours) 800-424-9300

For MSDS, Product Safety, or regulatory inquiries, call:
Customer Service: 800-906-9977

Customer Service: 800-906-9977

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS#</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium alkylnaphthalenesulfonate</td>
<td>Trade secret</td>
<td>&gt; 95.0 %</td>
</tr>
<tr>
<td>Sodium sulfate</td>
<td>7757-82-6</td>
<td>&lt; 2.5 %</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>&lt; 2.0 %</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt; 0.002 %</td>
</tr>
</tbody>
</table>

3. HAZARDS IDENTIFICATION

APPEARANCE

Physical state: Powder
Color: Tan
Odor: Mild acrid sulfonate
EMERGENCY OVERVIEW

WARNING!

CAUSES EYE IRRITATION.

MAY BE HARMFUL IF SWALLOWED.
AIRBORNE DUST PARTICLES MAY FORM EXPLOSIVE AIR-DUST MIXTURE.
SEE SECTION 11 FOR INFORMATION ON CHRONIC HEALTH EFFECTS.

POTENTIAL HEALTH EFFECTS

Swallowing
Acute effects
Symptoms of overexposure via ingestion include nausea and vomiting.

Skin absorption
Acute effects
Exposure to small quantities is not expected to cause adverse health effects.

Inhalation
Acute effects
Dust may cause irritation of the respiratory tract.

Skin contact
Acute effects
Causes slight to moderate irritation.

Eye contact
Acute effects
Causes severe irritation.

POTENTIAL ENVIRONMENTAL EFFECTS

This product is expected to be moderately toxic to aquatic organisms.

4. FIRST AID MEASURES

Swallowing
Obtain medical attention immediately.

Skin
Immediately flush skin thoroughly with water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention if irritation persists.

Inhalation
Remove to fresh air. Obtain medical attention if symptoms persist.
Eye contact
Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention.

5. FIRE-FIGHTING MEASURES

Flash point: > 94 °C (> 200 °F)

Special protective equipment for firefighters
Use self-contained breathing apparatus when fighting fires in enclosed areas.

Extinguishing media
Suitable: Extinguish with:
- water fog
- dry chemical
- CO2
- alcohol resistant foam
- water spray

Unsuitable: None.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Wear suitable protective equipment.

Methods for cleaning up
Eliminate sources of ignition.
Sweep up and collect in a suitable container for disposal.
Sweep up using non-sparking equipment.
Observe government regulations.

7. HANDLING AND STORAGE

HANDLING

Handling precautions
Prevent accumulation of dust particles. Avoid dispersion of dust to reduce fire and explosion potential. Avoid sparks and flame under dust conditions. Do not get in eyes, on skin, on clothing. Wear recommended personal protection equipment.

STORAGE
Storage requirements
Causes eye irritation. Store at ambient temperature. Keep drums tightly closed to prevent contamination.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION

Hand protection / protective gloves
Neoprene

Eye protection
Monogoggles

Skin protection
Rubber or plastic apron

Industrial hygiene measures
Remove contaminated clothing and clean it.

EXPOSURE LIMITS

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Value</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulates not otherwise regulated</td>
<td>TWA, OSHA</td>
<td>15.0 mg/m³</td>
<td>Total dust</td>
</tr>
<tr>
<td></td>
<td>TWA, OSHA</td>
<td>5.0 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td></td>
<td>TWA - ACGIH</td>
<td>10.0 mg/m³</td>
<td>Total inhalable dust</td>
</tr>
<tr>
<td></td>
<td>TWA - ACGIH</td>
<td>3.0 mg/m³</td>
<td>Respirable fraction</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>TWA, OSHA</td>
<td>50.0 mg/m³</td>
<td>10.0 ppm</td>
</tr>
<tr>
<td></td>
<td>STEL, OSHA</td>
<td>75.0 mg/m³</td>
<td>15.0 ppm</td>
</tr>
<tr>
<td></td>
<td>TWA (skin), ACGIH</td>
<td>10.0 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>STEL, ACGIH</td>
<td>15.0 ppm</td>
<td></td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE
Product name: PETRO AG SPECIAL POWDER

Physical state: Powder
Color: Tan
Odor: Mild acrid sulfonate

OTHER PROPERTIES

Boiling point: Decomposes
Melting point: Not determined
pH: 7.5 - 10
Concentration: 50 g/l
Vapor pressure: Negligible
Vapor density (air=1): Non Volatile
Solubility in water: Soluble
Flash point: > 94 °C (> 200 °F)
Method: Pensky-Martens closed cup ASTM D 93
Percent volatiles: 0 - 2 %(m)

10. STABILITY AND REACTIVITY

Stability: Stable.
Stability - Conditions to avoid
Stable under normal conditions.

Incompatible materials
Strong oxidizing agents.

Hazardous combustion products
Carbon monoxide.
Carbon dioxide.
Oxides of sulfur.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

SWALLOWING
Test results
Acute toxicity: LD50 - Rats (Males)
Result: 5,620 mg/kg

SKIN ABSORPTION

Test results
Acute toxicity: LD50 - Rabbit
Result: > 2,000 mg/kg

SKIN CONTACT

Test results
Skin irritation: Species: Rabbit
Exposure time: 24 h
Result: Minor erythema, minor edema
Classification: Not irritant

EYE CONTACT

Test results
Eye irritation: Species: Rabbit
Result: Severe irritation
Classification: Irritant
Remark: 0,1 ml

CARCINOGENICITY

Assessment
In a two year inhalation study, the National Toxicology Program (NTP) found there was clear evidence of carcinogenic activity of naphthalene in male and female rats based on increased incidences of respiratory epithelial adenoma and olfactory epithelial neuroblastoma of the nose. Naphthalene is classified by the International Agency for Research on Cancer (IARC) as Group 2B - “human inadequate evidence, animal sufficient evidence”.

12. ECOLOGICAL INFORMATION

This product is expected to be moderately toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

General: It is our opinion this product is not a RCRA hazardous waste. It is the generator's responsibility to make their own determination as to the RCRA status of waste they generate. We have not performed a Toxicity Characteristic Leachate Procedure (TCLP) on this product. Incinerate in a
furnace where permitted under appropriate Federal, State, and local regulations.

Non-cleaned packages
Dispose of washing solution in the same way as product.

14. TRANSPORT INFORMATION

DOT Classification

This product is not regulated by DOT.

Freight description road: CLEANING, SCOURING OR WASHING COMPOUNDS, N.O.I.

IMDG Classification

This product is not regulated by IMDG.

ICAO Classification

This product is not regulated by ICAO.

15. REGULATORY INFORMATION

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.

Components present in this product at a level which could require reporting under the statute are:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS#</th>
<th>Max weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>&lt; 0.002</td>
</tr>
<tr>
<td>RQ 100 pounds</td>
<td>for naphthalene</td>
<td></td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) in 40CFR355 (used for SARA 302 and 304).

Components present in this product at a level which could require reporting under the statute are:

None.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

None.
Pennsylvania Right-To-Know Hazardous Substance List--Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.
Components present in this product at a level which could require reporting under the statute are: None.

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS#</th>
<th>New Jersey TS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td></td>
</tr>
<tr>
<td>Sodium sulfate</td>
<td>7757-82-6</td>
<td></td>
</tr>
<tr>
<td>Sodium alkylnapthalenesulfonate</td>
<td>Trade secret</td>
<td>136411-5338P</td>
</tr>
</tbody>
</table>

EPA Hazard Categories (SARA 311, 312): Immediate Health Hazard

CHEMICAL INVENTORY

United States: The ingredients of this product are on the TSCA inventory.

16. OTHER INFORMATION

RECOMMENDED USES AND RESTRICTIONS
Please consult the product and/or application information bulletins for this product.

HMIS RATING

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>PPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

LEGEND

<table>
<thead>
<tr>
<th>STP</th>
<th>Standard temperature and pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>W/W</td>
<td>Weight/Weight</td>
</tr>
<tr>
<td>0 (HMIS)</td>
<td>Minimal hazard</td>
</tr>
<tr>
<td>1 (HMIS)</td>
<td>Slight hazard</td>
</tr>
<tr>
<td>2 (HMIS)</td>
<td>Moderate hazard</td>
</tr>
<tr>
<td>3 (HMIS)</td>
<td>Serious hazard</td>
</tr>
<tr>
<td>4 (HMIS)</td>
<td>Severe hazard</td>
</tr>
<tr>
<td>X (HMIS)</td>
<td>Personal protection rating to be supplied by user depending on use conditions</td>
</tr>
</tbody>
</table>

The opinions expressed herein are those of qualified experts within Akzo Nobel. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Akzo Nobel, it is the user's obligation to determine the conditions of safe use of the products.