SAFETY DATA SHEET

Section 1 - Identification

Product Identifier: ROAD AWAY All Vehicle Wash Concentrate
Other means of identification: 1220
Recommended use: Vehicle detergent.
Recommended restrictions: For commercial and industrial use only.

Manufacturer / Importer / Supplier / Distributor Information
- Company Name: National Chemical Laboratories of PA, Inc.
- Address: 401 N. 10th Street - Philadelphia, PA 19123
- Telephone: 1 (215) 922-1200
- Supplier Email: info@nclonline.com
- Contact: CHEM-TEL
- Emergency Phone: 1 (800) 255-3924

Section 2 - Hazard(s) Identification

SDS Hazards and Warnings are based on the undiluted product. Refer to diluted SDS for Ready-To-Use Hazards and Warnings.

<table>
<thead>
<tr>
<th>Physical Hazards</th>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Hazards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OSHA defined hazards</td>
<td>Not Classified.</td>
<td></td>
</tr>
</tbody>
</table>

Hazard Symbol: 

Signal Word: Danger

Hazard Statement: Causes skin irritation. Causes serious eye damage.

Precautionary statement:
- Prevention: Do not breathe mist or vapor. Wear protective gloves. Wear eye/face protection.
- Response: If on skin: Wash with plenty of water. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor. If skin irritation occurs: Get medical advice/attention. If swallowed: Rinse mouth. Do NOT induce vomiting. If inhaled: Remove person to fresh air and keep comfortable for breathing. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- Storage: Store locked up.
- Disposal: Dispose of contents/container in accordance with local/regional/national/international regulations.
- Hazard(s) not otherwise classified (HNOC): None known.

Section 3 - Composition/Information on ingredients

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzenesulfonic acid, dodecyl-, potassium salt</td>
<td>27177-77-1</td>
<td>5 - 10</td>
</tr>
<tr>
<td>4-Nonylphenol, branched, ethoxylated</td>
<td>127087-87-0</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Sodium Silicate</td>
<td>1344-09-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol</td>
<td>112-34-5</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Section 4 - First-aid Measures

Inhalation: Move to fresh air. Get medical attention if irritation persists.
Skin contact: Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do.
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Ingestion
Continue rinsing. Call a physician or poison control center immediately.
Most Important symptoms/effects, acute and delayed
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment
Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General Information
Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Section 5 - Fire-fighting measures

Suitable extinguishing media
Water fog. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media
Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical
During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters
Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire-fighting equipment/instructions
move containers from fire area if you can do it without risk.
General fire hazards
No unusual fire or explosion hazards noted.
Specific Methods
Use standard firefighting procedures and consider the hazards of other involved materials.

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures.
Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up
This product is miscible in water.
Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.
Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

Section 7 - Handling and storage

Precautions for safe handling
Do not breathe mist or vapor. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities
Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

Section 8 - Exposure control/personal protection

Occupational exposure limits
US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Component</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)</td>
<td>TWA</td>
<td>10 ppm</td>
<td>Inhalable fraction and vapor.</td>
</tr>
</tbody>
</table>

Biological limit values
No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls
Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment
Eye/face protection
If use of product risks exposure to contact, wear safety glasses with side shields.
Skin protection
Hand protection
Impervious gloves are recommended for prolonged use.
Other
If use of product risk exposure to contact, wear suitable protective clothing.
Respiratory protection
In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards
Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

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Section 9 - Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Light amber</td>
</tr>
<tr>
<td>Odor</td>
<td>Citrus</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>12.3</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>212 °F (100 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>None to boiling</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td></td>
</tr>
<tr>
<td>Flammability limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability limit - upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - lower (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive limit - upper (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Similar to water</td>
</tr>
<tr>
<td>Vapor density</td>
<td>Similar to water</td>
</tr>
<tr>
<td>Relative density</td>
<td>1.06 ± 0.01</td>
</tr>
<tr>
<td>Relative density temperature</td>
<td>75 °F (23.9 °C)</td>
</tr>
<tr>
<td>Solubilities (water)</td>
<td>Completely soluble</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>n-octanol/water</td>
<td></td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>80 cSt</td>
</tr>
<tr>
<td>Viscosity Temperature</td>
<td>75 °F (23.9 °C)</td>
</tr>
</tbody>
</table>

Section 10 - Stability and reactivity

Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability
Material is stable under normal conditions.

Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use.

Conditions to Avoid
Do not mix with other chemicals. Contact with incompatible materials.

Incompatible materials
Acids. Oxidizing agents.

Hazardous Decomposition Products
No hazardous decomposition products are known.

Section 11 - Toxicological information

Information on likely routes of exposure

Inhalation
May cause irritation to the respiratory system. Prolonged inhalation may be harmful.

Skin contact
Causes skin irritation.

Eye contact
Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics
Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity
Not expected to be acutely toxic.

Components | Level | Type | Code | Species | Results       |
------------|-------|------|------|---------|---------------|
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5) | Acute | Dermal | LD50 | Rabbit | 2764 mg/kg, (Male) |
Sodium Silicate (CAS 1344-09-8) | Acute | Dermal | LD50 | Rabbit | >4640 mg/kg |
| Acute | Oral | LD50 | Rat | 1.1 g/kg |

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/ eye irritation
Causes serious eye damage.

Respiratory sensitization
Not a respiratory sensitizer.

Skin sensitization
This product is not expected to cause skin sensitization.
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Germ cell mutagenicity
No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity
This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity
This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure
Not classified.

Specific target organ toxicity - repeated exposure
Not classified.

Aspiration hazard
Not an aspiration hazard.

Chronic effects
Prolonged inhalation may be harmful.

Section 12 - Ecological Information

Ecotoxicity
The product is highly diluted and is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability
No data is available on the degradability of this product.

Bioaccumulative potential
Not known.

Partition coefficient n-octanol / water log (Kow)

<table>
<thead>
<tr>
<th>Components</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)</td>
<td>0.56</td>
</tr>
<tr>
<td>4-Nonylphenol, branched, ethoxylated (CAS 127087-87-0)</td>
<td>2.1 - 3.4 (Calculated)</td>
</tr>
</tbody>
</table>

Mobility in soil
No data available.

Mobility in general
No data available.

Other adverse effects
No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

Section 13 - Disposal considerations

Disposal instructions
Dispose in accordance with applicable federal, state, and local regulations.

Local disposal regulations
Dispose of in accordance with local regulations.

Hazardous waste code
Waste codes should be assigned by the user based on the application for which the product was used.

Waste from residues / unused products
Dispose in accordance with all applicable regulations.

Contaminated packaging
Since emptied containers may retain product residue, follow label warnings even after container is emptied.

Section 14 - Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transportation in bulk according to Annex II of MARPOL 73/78 and IBC Code
This substance/mixture is not intended to be transported in bulk.

Section 15 - Regulatory Information

US federal regulations
This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR707, Subpt. D)
Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

<table>
<thead>
<tr>
<th>Components</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)</td>
<td>LISTED</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard Categories
Immediate Hazard: Yes
Delayed Hazard: No
Fire Hazard: No
Pressure Hazard: No
Reactivity Hazard: No

SARA 302 Extremely hazardous substance
Not listed.

SARA 311/312 Hazardous chemical
No

SARA 313 (TRI reporting)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS #</th>
<th>% by wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Butoxyethoxy) Ethanol</td>
<td>112-34-5</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Other federal regulations
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HSPs) List

Components
SAFETY DATA SHEET

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)  Not regulated.
Safe Drinking Water Act (SDWA)  Not regulated.
Food and Drug Administration (FDA)  Not regulated.

US state regulations

US. Massachusetts RTK - Substance List  Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. New Jersey Worker and Community Right-to-Know Act  Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. Pennsylvania RTK - Hazardous Substances  Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. Rhode Island RTK  Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

US. California Proposition 65  California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region  Inventory Name  On Inventory (yes/no)*
Australia  Australian Inventory of Chemical Substances (AICS)  Yes
Canada  Domestic Substances List (DSL)  Yes
Canada  Non-Domestic Substances List (NDSL)  No
China  Inventory of Existing Chemical Substances in China (IECSC)  Yes
Europe  European Inventory of Existing Commercial Chemical Substances (EINECS)  No
Europe  European List of Notified Chemical Substances (ELINCS)  No
Japan  Inventory of Existing and New Chemical Substances (ENCS)  No
Korea  Existing Chemicals List (ECL)  Yes
New Zealand  New Zealand Inventory  Yes
Philippines  Philippine Inventory of Chemicals and Chemical Substances  No
United States Puerto Rico  Toxic Substances Control Act (TSCA) Inventory  Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
*A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

Components
2-(2-Butoxyethoxy) Ethanol (CAS 112-34-5)

Section 16 - Other information, including date of preparation or last version

Revision date  1/17/2018
Version #  02
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