SAFETY DATA SHEET

ASPHALT RELEASE AGENT R-6690 5GL

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Material name: ASPHALT RELEASE AGENT R-6690 5GL
Material number: 000000000000086735
Manufacturer or supplier's details
Company: Zep Inc.
Address: 1310 Seaboard Industrial Blvd., NW
          Atlanta, GA 30318
Telephone: 404-352-1680

Emergency telephone numbers
For SDS Information: Compliance Services 1-877-428-9937
For a Medical Emergency: 877-541-2016 Toll Free - All Calls Recorded
For a Transportation Emergency: CHEMTREC: 800-424-9300 - All Calls Recorded.
In the District of Columbia 202-483-7616

SECTION 2. HAZARDS IDENTIFICATION

Emergency Overview
Appearance: viscous, liquid
Colour: blue
Odour: mild

GHS Classification
Skin irritation: Category 2
Eye irritation: Category 2A

GHS Label element
Hazard pictograms:

Signal word: Warning
Hazard statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements:
Prevention:
P264 Wash skin thoroughly after handling.
P280 Wear eye protection/face protection.
P280 Wear protective gloves.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313 If skin irritation occurs: Get medical advice/attention.
P337 + P313 If eye irritation persists: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.

Potential Health Effects

Carcinogenicity:

IARC
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

OSHA
No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium dodecylbenzenesulfonate</td>
<td>25155-30-0</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

General advice
- Move out of dangerous area.
- Show this safety data sheet to the doctor in attendance.
- Do not leave the victim unattended.

If inhaled
- If breathed in, move person into fresh air.
- Remove person to fresh air. If signs/symptoms continue, get medical attention.
- If unconscious place in recovery position and seek medical advice.
- If symptoms persist, call a physician.

In case of skin contact
- In case of contact, immediately flush skin with plenty of water.
- Take off contaminated clothing and shoes immediately.
- Get medical attention if irritation develops and persists.
- Wash contaminated clothing before re-use.
- If skin irritation persists, call a physician.
- If on skin, rinse well with water.
- If on clothes, remove clothes.
In case of eye contact:
- Immediately flush eye(s) with plenty of water.
- If easy to do, remove contact lens, if worn.
- If eye irritation persists, consult a specialist.
- Immediately flush eye(s) with plenty of water.
- Remove contact lenses.
- Protect unharmed eye.
- Keep eye wide open while rinsing.
- If eye irritation persists, consult a specialist.

If swallowed:
- Gently wipe or rinse the inside of the mouth with water.
- If symptoms persist, call a physician or Poison Control Centre immediately.
- DO NOT induce vomiting unless directed to do so by a physician or poison control center.
- Induce vomiting immediately and call a physician.
- Keep respiratory tract clear.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.
- If symptoms persist, call a physician.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Dry chemical

Unsuitable extinguishing media: High volume water jet

Hazardous combustion products:
- Carbon dioxide (CO2)
- Carbon monoxide
- Smoke
- Sulphur oxides

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Further information: Standard procedure for chemical fires.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment.

Environmental precautions:
- Prevent further leakage or spillage if safe to do so.
- If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
Neutralise with acid.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling: Do not breathe vapours/dust.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid: Oxidizing agents
Do not freeze.
Do not store near acids.

Storage temperature: 5 - 40 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

Personal protective equipment
Respiratory protection: No personal respiratory protective equipment normally required.

Hand protection
Remarks: Skin should be washed after contact. For prolonged or repeated contact use protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves.
The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Eye wash bottle with pure water
Tightly fitting safety goggles
Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures:
- When using do not eat or drink.
- When using do not smoke.
- Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**: viscous, liquid
- **Colour**: blue
- **Odour**: mild
- **Odour Threshold**: no data available
- **pH**: 10.2 - 11
- **Melting point/freezing point**: no data available
- **Boiling point**: 100 °C
- **Flash point**: does not flash
- **Evaporation rate**: 1
- **Upper explosion limit**: not applicable
- **Lower explosion limit**: not applicable
- **Vapour pressure**: no data available
- **Relative vapour density**: no data available
- **Density**: no data available
- **Solubility**: soluble in cold water, soluble in hot water
- **Partition coefficient: n-octanol/water**: no data available
- **Auto-ignition temperature**: not determined
- **Thermal decomposition**: no data available

SECTION 10. STABILITY AND REACTIVITY

- **Chemical stability**: Stable under normal conditions.
- **Possibility of hazardous reactions**: No decomposition if stored and applied as directed.
- **Conditions to avoid**: Exposure to moisture.
- **Incompatible materials**: Acids
Hazardous decomposition products: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Sulphur oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product:
Acute oral toxicity: Acute toxicity estimate: 4,354 mg/kg
Method: Calculation method

Components:
sodium dodecylbenzenesulfonate:
Acute oral toxicity: LD50 Oral rat: 438 mg/kg

Skin corrosion/irritation

Product:
Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation

Product:
Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
no data available

Reproductive toxicity
no data available

sodium dodecylbenzenesulfonate:
STOT - single exposure
no data available

STOT - repeated exposure
no data available

Aspiration toxicity
no data available

Further information
**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

**Product:**

Partition coefficient: n-octanol/water : Remarks: no data available

**Mobility in soil**

no data available

**Other adverse effects**

no data available

**Product:**

Regulation 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances

Remarks This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : no data available

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods**

**Waste from residues**

Dispose of in accordance with local regulations.

Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with chemical or used container.

**Contaminated packaging**

Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.
SECTION 14. TRANSPORT INFORMATION

International regulation

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

National Regulations

49 CFR
Not regulated as a dangerous good

Special precautions for user
not applicable

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Component RQ (lbs)</th>
<th>Calculated product RQ (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium dodecylbenzenesulfonate</td>
<td>25155-30-0</td>
<td>1000</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
SAFETY DATA SHEET

ASPHALT RELEASE AGENT R-6690 5GL

Version 1.0  Revision Date 11/03/2014  Print Date 06/30/2016

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

methanol

67-56-1

The components of this product are reported in the following inventories:

- **TSCA**: On TSCA Inventory
- **DSL**: All components of this product are on the Canadian DSL.
- **AICS**: On the inventory, or in compliance with the inventory
- **NZIoC**: Not in compliance with the inventory
- **PICCS**: On the inventory, or in compliance with the inventory
- **IECSC**: On the inventory, or in compliance with the inventory

Inventory Acronym and Validity Area Legend:

- **AICS** (Australia), **DSL** (Canada), **IECSC** (China), **REACH** (European Union), **ENCS** (Japan), **ISHL** (Japan), **KECI** (Korea), **NZIoC** (New Zealand), **PICCS** (Philippines), **TSCA** (USA)

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SECTION 16. OTHER INFORMATION

Further information

**NFPA:**

- Flammability
- Health
- Instability
- Special hazard.

**HMIS III:**

- HEALTH: 2
- FLAMMABILITY: 0
- PHYSICAL HAZARD: 0

0 = not significant, 1 = Slight, 2 = Moderate, 3 = High, 4 = Extreme, * = Chronic

OSHA GHS Label Information:

- Hazard pictograms: ![Warning]
- Signal word: Warning
- Hazard statements: Causes skin irritation. Causes serious eye irritation.
- Precautionary statements:
  - **Prevention:** Wash skin thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.
  - **Response:** IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF skin irritation occurs: Get medical advice/attention. IF eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
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