Section 1. Identification

SABICOL LS7 (Natural fatty alcohol ethoxylates)
Alcohols, C12-18, ethoxylated
(C12-C18) Alkyl alcohol ethoxylate; C12-18 Alkyl alcohol ethoxylate; Poly(oxy-1, 2-ethanediyl), .alpha.-((C12-C18) alkyl-.omega.-hydroxy-
Liquid.

Saudi Basic Industries Corporation (SABIC)
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SABIC Access Code: 333619

Section 2. Hazards identification

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
AQUATIC TOXICITY (ACUTE) - Category 1
AQUATIC TOXICITY (CHRONIC) - Category 3

GHS label elements

Danger
Causes serious eye damage.
Very toxic to aquatic life.
Harmful to aquatic life with long lasting effects.

Precautionary statements
Wear eye or face protection. Avoid release to the environment. Wash hands thoroughly after handling.

Collect spillage. 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 or physician.

Not applicable.

None known.

9/25/2014. : Date of issue/Date of revision 3.02 : Version
Section 3. Composition/information on ingredients

**Mixture**
Alcohols, C12-18, ethoxylated
(C12-C18) Alkyl alcohol ethoxylate; C12-18 Alkyl alcohol ethoxylate; Poly(oxy-1, 2-ethanediyl), .alpha.-((C12-C18) alkyl-.omega.-hydroxy-

**CAS number/other identifiers**
Not applicable.
500-201-8

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<td>Alcohols, C12-18, ethoxylated</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

**Description of necessary first aid measures**

- **Eye contact**
  - Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

- **Inhalation**
  - Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

- **Skin contact**
  - Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

- **Ingestion**
  - Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Most important symptoms/effects, acute and delayed**

- **Potential acute health effects**
  - Causes serious eye damage.
  - May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
  - No known significant effects or critical hazards.
  - May cause burns to mouth, throat and stomach.

- **Over-exposure signs/symptoms**

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Section 4. First aid measures

Adverse symptoms may include the following:
- pain
- watering
- redness

No specific data.

Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur

Adverse symptoms may include the following:
- stomach pains

Protection of first-aiders:
- No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician:
- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- No specific treatment.
- No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Specific treatments:
- No specific treatment.

Skin contact:
- Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur

Ingestion:
- Adverse symptoms may include the following:
  - stomach pains

Inhalation:
- Adverse symptoms may include the following:
  - pain or irritation
  - redness
  - blistering may occur

Eye contact:
- Adverse symptoms may include the following:
  - pain
  - watering
  - redness

Indication of immediate medical attention and special treatment needed, if necessary:
- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- No specific treatment.
- No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media:
- Use an extinguishing agent suitable for the surrounding fire.
- None known.

In a fire or if heated, a pressure increase will occur and the container may burst. This material is very toxic to aquatic life. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- No specific data.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Suitable extinguishing media:
- None known.

Unsuitable extinguishing media:
- None known.

Specific hazards arising from the chemical:
- None known.

Hazardous thermal decomposition products:
- None known.

Special protective actions for fire-fighters:
- None known.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:
- No action shall be taken involving any personal risk or without suitable training.
- Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

For non-emergency personnel:
- None known.

For emergency responders:
- None known.
Section 6. Accidental release measures

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

**Environmental precautions**
- Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

**Methods and materials for containment and cleaning up**

- Large spill:
  - Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

- Small spill:
  - Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Section 7. Handling and storage**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Precautions for safe handling:
  - Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**Section 8. Exposure controls/personal protection**

**Control parameters**

**Occupational exposure limits**

- None.

- Recommended monitoring procedures:
  - If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

- Appropriate engineering controls:
  - If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

- Environmental exposure controls:
  - Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

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Section 8. Exposure controls/personal protection

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

**Appearance**
- Liquid.
- Not available.
- Not available.
- Not available.
- 6 to 8 [Conc. (% w/w): 5%]
- 15°C (59°F)
- Not available.
- Open cup: >190°C (>374°F)
- Not applicable.
- Not applicable.
- Not applicable.
- Not applicable.
- Not available.
- Not available.
- Not available.
- Not available.
- Soluble in the following materials: cold water.
- Not available.
- Not available.
- Not available.
- Not available.

**Physical state**
- Not available.

**Color**
- Not available.

**Odor**
- Not available.

**Odor threshold**
- 6 to 8 [Conc. (% w/w): 5%]

**pH**
- Not available.

**Melting point/freezing point**
- Not available.

**Boiling point**
- Not available.

**Flash point**
- Not applicable.

**Burning time**
- Not applicable.

**Burning rate**
- Not applicable.

**Evaporation rate**
- Not available.

**Flammability (solid, gas)**
- Not available.

**Lower and upper explosive (flammable) limits**
- Not available.

**Vapor pressure**
- Not available.

**Vapor density**
- Not available.

**Relative density**
- Not available.

**Solubility**
- Not available.

**Partition coefficient: n-octanol/water**
- Not available.

**Auto-ignition temperature**
- Not available.

**Decomposition temperature**
- Not available.
Section 9. Physical and chemical properties

Not available. : SADT
Not available. : Viscosity

Section 10. Stability and reactivity

No specific test data related to reactivity available for this product or its ingredients. : Reactivity

The product is stable. : Chemical stability

Under normal conditions of storage and use, hazardous reactions will not occur. : Possibility of hazardous reactions

No specific data. : Conditions to avoid

No specific data. : Incompatible materials

Under normal conditions of storage and use, hazardous decomposition products should not be produced. : Hazardous decomposition products

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

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<th>Observation</th>
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<td>100 milligrams</td>
<td>-</td>
<td>Rabbit</td>
<td>Eyes - Severe irritant</td>
<td>Alcohols, C12-18, ethoxylated</td>
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Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Not available. : Information on the likely routes of exposure

Potential acute health effects
Section 11. Toxicological information

Causes serious eye damage.
May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
No known significant effects or critical hazards.
May cause burns to mouth, throat and stomach.

Inhalation:
May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
May cause burns to mouth, throat and stomach.

Ingestion:

Skin contact:
No known significant effects or critical hazards.

Eye contact:
Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Adverse symptoms may include the following:
pain
watering
redness
No specific data.

Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Adverse symptoms may include the following:
stomach pains

General:
No known significant effects or critical hazards.

Carcinogenicity:
No known significant effects or critical hazards.

Mutagenicity:
No known significant effects or critical hazards.

Teratogenicity:
No known significant effects or critical hazards.

Developmental effects:
No known significant effects or critical hazards.

Fertility effects:
No known significant effects or critical hazards.

Potential chronic health effects
Not available.

Potential immediate effects
Not available.

Potential delayed effects
Not available.

Numerical measures of toxicity
Acute toxicity estimates
Not available.

Section 12. Ecological information

Toxicity
Not available.

Persistence and degradability
Not available.

Bioaccumulative potential

9/25/2014. : Date of issue/Date of revision  3.02 : Version
Section 12. Ecological information

Not available.

**Mobility in soil**

Not available.

: Soil/water partition coefficient ($K_{OC}$)

No known significant effects or critical hazards.

: Other adverse effects

Section 13. Disposal considerations

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

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**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Alcohols, C12-18, ethoxylated)**

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<td></td>
</tr>
</tbody>
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Transport hazard class(es):

9

Packing group:

III

Environmental hazards:

Yes.

Additional information:

- Not available.

: Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

9/25/2014. : Date of issue/Date of revision 3.02 : Version
Section 15. Regulatory information

No known specific national and/or regional regulations applicable to this product (including its ingredients).

Safety, health and environmental regulations specific for the product:

Chemical Weapons Convention List Schedule I Chemicals: Not listed
Chemical Weapons Convention List Schedule II Chemicals: Not listed
Chemical Weapons Convention List Schedule III Chemicals: Not listed

National Fire Protection Association (U.S.A.)

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Section 16. Other information

History

Date of printing: 9/25/2014.
Date of issue/Date of revision: 9/25/2014.
Date of previous issue: 9/25/2014.
Version: 3.02

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

References

Date of issue/Date of revision: 9/25/2014.
Version: 3.02.
Section 16. Other information

The information contained in the Safety Data Sheet is at the date of its issuance to the best of our knowledge correct according to the data available to us. The information is meant as a guideline for safe use, handling, disposal, storage and transport of products and does not imply any warranty (not implied nor explicitly) or specification. The Supplier shall to the extent permitted by law not be liable for any error or incorrectness in the information contained in this Safety Data Sheet. The information relates exclusively to the specified products, which may not be suitable for combination with other materials or use in processes other than those specifically described here.