SECTION 1: Identification of the substance or mixture and the company or undertaking

1.1 Product identifier

- **Product type**: Mixture
- **Trade name**: CA5011 C10 Alcohol
- **Label name**: CA5011 C10 Alcohol
- **Chemical name**: Decanol, decyl alcohol, decan-1-ol
- **CAS number**: 112-30-1
- **EC number**: 203-956-9

1.2 Recommended and restricted uses of the substance or mixture

- **Recommended uses**: Industrial, cleaners, surfactants, agriculture additives, textile additives, lubricants, inks.
- **Restricted uses**: None known.

1.3 Company identification

- **Company name**: Chemical Associates – A Division of Univar USA Inc.
- **Company address**: 1270 South Cleveland Massillon Road, Copley, OH 44321-1683
- **Company telephone**: 330-666-5200

1.4 Emergency telephone number

- **Company emergency telephone**: 800-347-2891
- **CHEMTREC telephone**: 800-424-9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- **Classification (29CFR1910.1200 Appendix A)**: Serious eye irritation category 2A.
- **GHS physical hazard**: None.
- **GHS health hazard**: Serious eye irritation category 2A.
- **GHS environmental hazard**: Acute aquatic toxicity category 3.

2.2 Label warnings of the substance or mixture

- **Signal word**: Warning.
- **Hazard statements**: H319 Causes serious eye irritation. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements:

- P264 Wash hands thoroughly after handling.
- P273 Avoid release to the environment.
- P280 Wear protective gloves/protective clothing/eye protection.
- P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P337+313: If eye irritation persists: Get medical advice/attention.
- P501 Dispose of contents/container to an approved disposal facility only in accordance with local, state and federal regulations.

Hazard symbol (pictogram):

2.3 Hazards not otherwise classified

Other hazards: No additional information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name</th>
<th>Percent</th>
<th>CAS number</th>
<th>Health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Common name</th>
<th>Typical %</th>
<th>CAS number</th>
<th>Health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>n-Decanol</td>
<td>Decyl Alcohol</td>
<td>&gt;98</td>
<td>112-30-1</td>
<td>Skin and eye irritant</td>
</tr>
<tr>
<td>n-Octanol</td>
<td>Octyl Alcohol</td>
<td>&lt;1</td>
<td>111-87-5</td>
<td>Skin and eye irritant</td>
</tr>
<tr>
<td>n-Dodecanol</td>
<td>Lauryl Alcohol</td>
<td>&lt;1</td>
<td>112-53-8</td>
<td>Skin and eye irritant</td>
</tr>
</tbody>
</table>

SECTION 4: First-aid measures

4.1 Description of first-aid measures

<table>
<thead>
<tr>
<th>Exposure route</th>
<th>First-aid measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Remove the victim into fresh air. Observe victim’s breathing. If breathing is labored seek immediate medical attention.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Wash immediately with soap and water. If irritation develops, seek medical attention. Launder contaminated clothing.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Rinse immediately with plenty of water for 15 minutes. Remove contact lenses if present and easy to do. If irritation persists, seek immediate medical (ophthalmologist) attention.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Rinse mouth with plenty of water. For ingestion of large quantities seek immediate medical attention. Do not induce vomiting. Contact</td>
</tr>
</tbody>
</table>
4.2 Most important symptoms and effects, both acute and delayed

<table>
<thead>
<tr>
<th>Symptoms after inhalation</th>
<th>May experience dizziness and headache.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Irritation of the nose and throat.</td>
</tr>
<tr>
<td>Symptoms after skin contact</td>
<td>Mild irritation of the skin may occur.</td>
</tr>
<tr>
<td>Symptoms after eye contact</td>
<td>Irritation of the eye tissue.</td>
</tr>
<tr>
<td></td>
<td>May cause cornea inflammation.</td>
</tr>
<tr>
<td>Symptoms after ingestion</td>
<td>Mild tingling of the tongue and mouth.</td>
</tr>
<tr>
<td></td>
<td>May cause gastrointestinal irritation, nausea and vomiting.</td>
</tr>
</tbody>
</table>

4.3 Indication of any immediate medical attention and special treatment needed

<table>
<thead>
<tr>
<th>Treatment after inhalation</th>
<th>If breathing is labored seek immediate medical attention.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment after skin contact</td>
<td>If skin irritation persists seek immediate medical attention.</td>
</tr>
<tr>
<td>Treatment after eye contact</td>
<td>If eye irritation persists seek immediate ophthalmologist attention.</td>
</tr>
<tr>
<td>Treatment after ingestion</td>
<td>If ingestion of a large quantity seek immediate poison control center.</td>
</tr>
</tbody>
</table>

SECTION 5: Firefighting measures

5.1 Extinguishing media

<table>
<thead>
<tr>
<th>Suitable media</th>
<th>Carbon dioxide, alcohol resistant foam and water spray.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable media</td>
<td>None known.</td>
</tr>
</tbody>
</table>

5.2 Specific hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Direct fire hazard</th>
<th>Combustible liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indirect fire hazard</td>
<td>Exposure to temperature above the flash point (107°C).</td>
</tr>
<tr>
<td>Explosive hazard</td>
<td>Exposure to temperature above the flash point (107°C).</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Reactivity with strong oxidizers.</td>
</tr>
<tr>
<td>Combustion products</td>
<td>Carbon dioxide and carbon monoxide.</td>
</tr>
</tbody>
</table>

5.3 Special protective equipment and precautions for fire-fighters

<table>
<thead>
<tr>
<th>Protective equipment</th>
<th>Full protective clothing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautions</td>
<td>May cause toxic effects if inhaled or absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>Inhalation or contact with material may irritate or burn skin and eyes.</td>
</tr>
<tr>
<td></td>
<td>Fire may produce irritating, corrosive and/or toxic gases. Vapors may cause dizziness or suffocation.</td>
</tr>
<tr>
<td>Emergency response guide</td>
<td>ERG 128.</td>
</tr>
</tbody>
</table>

SECTION 6: Accidental release measures
6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Mixture is an irritant. Mixture is a combustible liquid. If mixture is a mist, stay upwind.

Protective equipment: Wear rubber gloves, rubber boots, face shield and chemical hazard suit. If material is a mist wear dust mask or self contained breathing apparatus.

Emergency procedures: Spray the spill area with water. Contain and dissipate mist via spraying with water. If mixture is a mist, alert immediate neighborhood to close windows and doors. Mark the spill area with hazard tape or cones. Contain the spill area with suitable absorbent. Keep away from heat, sparks, open flames, hot surfaces. Keep away from streams, rivers and lakes.

6.2 Environmental precautions

Precautions: Keep out of streams, rivers and lakes. Mixture is toxic to aquatic organisms. Abide by all laws per this regulation.

6.3 Methods and materials for containment and cleanup

Methods: Use chemical absorbent pigs or manually spread chemical absorbent onto spill area. After the mixture is absorbed, dispose in approved waste facility.

Materials: Approved materials include dry earth, sand, clay, chemical absorbent, vermiculite and carbon.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling temperature: About 10 - 30°C.

Handling equipment: Ground/bond container and receiving equipment. Use only non-sparking tools. Rubber hoses, aluminum, carbon steel or stainless steel (grade 304) lines. Stainless steel (grade 304) for pumps.

7.2 Conditions for safe storage, including any incompatibilities

Storage area: Store in dry area. Store at room temperature. Store in dyke area to contain any spills. Protect from heat sparks, open flames, hot surfaces.

Packaging materials: Polyethylene, aluminum, carbon steel, stainless steel (grade 304), rubber lined or epoxy lined tanks or drums. Graphite or rubber gaskets.

Incompatibilities: Strong oxidizers, inorganic acids and halogens.
SECTION 8: Exposure controls/personal protection

8.1 Exposure controls

OSHA PEL : None.
ACGIH TLV : None.
NIOSH REL : None.

8.2 Appropriate engineering controls

Engineering controls : If mist exists, install ventilation equipped with carbon canisters. Ventilation should be 10 air exchanges per hour. Local exhaust ventilation is recommended.

8.3 Personal protection equipment

Personal protective equipment : Rubber gloves and safety glasses. Dust mask if mist exists.

SECTION 9: Physical and chemical properties

9.1 Physical and chemical properties

Appearance : Clear, colorless liquid.
Odor : Mild sweet pungent odor.
Odor threshold : No data available.
pH : No data available. Mixture is not readily soluble in water.
Melting point : 6°C.
Boiling point : 229°C.
Flash point : 107°C, Tag Closed Cup.
Evaporation rate : No data available.
Flammability : Not applicable.
Lower flammability limit : No data available.
Upper flammability limit : No data available.
Vapor pressure : < 5 Pa at 20°C
Vapor density : No data available.
Relative density : 0.83
Solubility : 21.1 mg/l at 20°C
Partition coefficient for n-octanol/water : Log Kow = 4.57
Auto-ignition temperature : 254°C
**SECTION 10: Stability and reactivity**

Reactivity: May react violently with oxidizers.
Chemical stability: Stable under storage conditions.
Possibility of hazardous reactions: Hazardous polymerization does not occur.
Incompatible materials: Not available.
Hazardous decomposition products: Carbon dioxide and carbon monoxide.

**SECTION 11: Toxicological information**

11.1 Information on the likely routes of exposure

Inhalation exposure: No a likely route of exposure.
Skin exposure: From mist or spray. From splashing.
Ingestion exposure: Not a likely route of exposure.
Eye contact: From mist or spray. From splashing.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: Labored breathing and irritation of the lungs may occur.
Skin contact: Mild skin irritation may occur.
Ingestion: Mild irritation of the mouth, tongue, esophagus and stomach may occur.
Eye contact: Mild eye irritation may occur.

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation: Chronic effects are not known.
Skin contact: Chronic effects are not known.
Ingestion: Chronic effects are not known.
Eye contact: Chronic effects are not known.

11.4 Numerical measures of toxicity

Oral LD50: Rat 4720 mg/kg
**CA5011 C10 Alcohol**  
**Safety Data Sheet**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin LD50</td>
<td>Rabbit 3560 mg/kg</td>
</tr>
<tr>
<td>Ingestion LD50</td>
<td>No data available.</td>
</tr>
<tr>
<td>Inhalation LC50</td>
<td>Rat &gt; 71 mg/l, 1 hr, /air.</td>
</tr>
<tr>
<td>Skin primary irritation</td>
<td>Rabbit, in vivo, EPA OPPTS 870.2500. Test duration 4 days, Observation period 10 days. Result: Moderately irritating.</td>
</tr>
</tbody>
</table>

**11.5 Carcinogenicity**

<table>
<thead>
<tr>
<th>Source</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Toxicology Program</td>
<td>Not listed.</td>
</tr>
<tr>
<td>International Agency for Cancer</td>
<td>Not listed.</td>
</tr>
<tr>
<td>OSHA</td>
<td>Not listed.</td>
</tr>
<tr>
<td>NIOSH</td>
<td>Not listed.</td>
</tr>
</tbody>
</table>

**11.6 Other toxicological information**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reproductive toxicity</td>
<td>Not classified.</td>
</tr>
<tr>
<td>Specific target organ toxicity,</td>
<td>No data available.</td>
</tr>
<tr>
<td>single exposure</td>
<td></td>
</tr>
<tr>
<td>Specific target organ toxicity,</td>
<td></td>
</tr>
<tr>
<td>repeated exposure</td>
<td></td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

**12.1.1 Ecotoxicity aquatic**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fish LC50</td>
<td>2.3 mg/l, 96 hours, fathead minnow, OECD 203 US EPA 1975.</td>
</tr>
<tr>
<td>Daphnia NOEC</td>
<td>110ug/l, 21 days, water flea, OECD 211.</td>
</tr>
<tr>
<td>Rotifer EC50</td>
<td>No data available.</td>
</tr>
<tr>
<td>Algae EC50</td>
<td>No data available.</td>
</tr>
</tbody>
</table>

**12.1.2 Ecotoxicity terrestrial**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecotoxicity terrestrial</td>
<td>No data available.</td>
</tr>
</tbody>
</table>
12.2 Persistence and degradability

Water: 88% OECD 301 D, 30 day duration.
     : Readily biodegradable.
Soil: Koc = 7300 at 25°C
     : Immobile.
Air: 1.0 days half life (n-decanol).

12.3 Bio-accumulative potential

Log Kow: 4.57

12.4 Mobility in soil

Surface tension: Air 28.9 dynes/cm at 20°C
Soil mobility: Koc = 7300 at 25°C
     : Immobile.

12.5 results of PBT and vPvB assessment

PBT and vPvB assessment: Not considered to be persistent, bio-accumulating or toxic (PBT).

12.6 Other adverse effects

Air: Not dangerous to the ozone layer.
Water: Mild pollutant to surface of water.

SECTION 13: Disposal considerations

13.1 Description of waste residues

Storage tank residues: Liquid residue from tank cleaning.
Empty package residues: Liquid residue remaining in emptied package container.
Transport trailer residues: Liquid residue from transport trailer cleaning.
Absorbent material: Solid absorbent containing mixture from a spill.

13.2 Safe handling of waste residues

Storage tank residues: Refer to section 7 for safe handling.
Empty package residues: Refer to section 7 for safe handling.
Transport trailer residues: Refer to section 7 for safe handling.
Absorbent material: Refer to section 7 for safe handling.

13.3 Methods of disposal

Storage tank residues: Dispose via an approved incineration facility.
Dispose via an approved land fill facility.
Dispose only in accordance with local, state and federal regulations.
Empty package residues: Remove package to an approved package cleaning and recycling facility.
Dispose only in accordance with local, state and federal regulations.
Transport trailer residues: Clean transport trailer at an approved cleaning facility.
Dispose of cleaning residues must be in accordance with local, state and federal regulations.
Absorbent material: Dispose via an approved incineration facility.
Dispose via an approved land fill facility.
Dispose only in accordance with local, state and federal regulations.

13.4 Hazardous waste classification (RCRA)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Regulation</th>
<th>Listed</th>
<th>Hazardous waste number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignitability</td>
<td>40CFR261.21</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Corrosivity</td>
<td>40CFR261.22</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Reactivity</td>
<td>40CFR261.23</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Toxicity</td>
<td>40CFR261.24</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

SECTION 14: Transport information

14.1 UN number

UN number: None.

14.2 UN proper shipping name

Proper shipping name: None.

14.3 Transport hazard class

Hazard class: None
Hazard label: None
Hazard pictogram: None.

14.4 Packing group

Packing group: None.

14.5 Environmental hazards

Marine pollutant: Not Listed

14.6 Transport in bulk
US DOT : Not regulated.
IMDG : Not regulated.
IATA : Not regulated.
MARPOL 73/78 : Not regulated.
IBC code : Not regulated.

14.7 Special precautions for user

Special precautions : No additional information available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the substance or mixture

15.1.1 US regulations

SARA 302 (40CFR355) : Not listed.
SARA 311/312 (40CFR370.66) : Not listed.
SARA 313 (40CFR372.65) : Not listed.
CERCLA (40CFR302.4) : Not listed.
California proposition 65 : Not listed.
German WGK class : WGK1 ID Number 71 (low hazard to water).

15.1.2 Chemical inventories

TSCA USA : Listed.
AICS Australia : Listed.
DSL Canada : Listed.
EC Europe : Listed.
ECL Korea : Listed.
IECSC China : Listed.
ENCS Japan : Listed.
NzloC New Zealand : Listed.
PICCS Philippines : Listed.
SWISS Switzerland : Listed.

15.2 Chemical safety assessment

Safety assessment : No additional information available.

SECTION 16: Other information

16.1 Hazard ratings
16.2 Safety Data Sheet information

Revision date (MM/DD/YY) : 06/18/2015
Supersede date (MM/DD/YY) : 07/25/2012

16.3 Notice to reader

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which Chemical Associates – A Division of Univar USA Inc. bears responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.