SAFETY DATA SHEET

1. PRODUCT AND COMPANY INFORMATION

Product identifier

Product name: APSA-80® All Purpose Spray Adjuvant Concentrate

Other means of identification

Product code: E3417, E9268, 603562, 603563, 763162, 763163, CXV3636A, CXV3636B

Synonyms: APSA 80® Soil Irrigation Aid

Recommended use of the chemical and restrictions on use

Recommended use: Adjuvant for agricultural applications, Soil irrigation aid

Uses advised against: Not for aquatic use.

Details of the supplier of the safety data sheet

E-mail address: sds@amway.com

Emergency telephone number

For Transportation: ChemTrec @ 1-800-424-9300

For Poisoning Emergencies call Amway’s poison control service in the United States at 1-616-787-6307. This is a 24-hour number.

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 2</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Label elements
3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

**Fire**
In case of fire: Use CO2, dry chemical, or foam for extinction

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**Hazard statements:**
Harmful if swallowed
Causes skin irritation
Causes serious eye damage
May cause respiratory irritation. May cause drowsiness or dizziness
Flammable liquid and vapor

**Precautionary Statements - Prevention**
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Use only non-sparking tools
Take precautionary measures against static discharge
Use explosion-proof electrical (ventilation and lighting) equipment
Avoid breathing vapors or mists
Use only outdoors or in a well-ventilated area

**Precautionary Statements - Response**

**Eyes**
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 doctor/physician

**Skin**
If skin irritation occurs: Get medical advice/attention
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse

**Inhalation:**
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

**Ingestion**
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

**Fire**
In case of fire: Use CO2, dry chemical, or foam for extinction

**Precautionary Statements - Storage**
Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**
Not applicable

**Other Information**
• Toxic to aquatic life with long lasting effects

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**APSA-80® All Purpose Spray Adjuvant Concentrate**

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**Revision Date:** 03-01-2016
Replaces Document Revised: 10-01-2015

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**Artwork:** 1042803

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### 4. FIRST AID MEASURES

**First aid measures**

**Eye contact:** Remove contact lenses. Rinse with gentle stream of water for 15 minutes, holding eyelids open. Get IMMEDIATE medical advice by calling a poison control center, doctor or hospital emergency room.

**Skin contact:** Remove contaminated clothing. Rinse skin thoroughly with water. Get medical advice by calling a poison control center, doctor or hospital emergency room. Launder contaminated clothing before reuse.

**Inhalation:** Move to fresh air. If irritation or breathing difficulty develops, GET MEDICAL ADVICE by calling a poison control center, doctor or hospital emergency room.

**Ingestion:** If victim is a child, give 4-8 ounces of water. For adults, give 8-12 ounces of water. Do not induce vomiting when this product is swallowed. If vomiting occurs spontaneously, keep victim in an upright position. GET MEDICAL ADVICE by calling a poison control center, doctor or hospital emergency room.

**Protection of first-aiders:** Use personal protective equipment as required.

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

**Symptoms:** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Notes to physician:** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media:** No information available.

**Specific hazards arising from the chemical**

Flammable. Substance may ignite but does not sustain combustion. Avoid ignition sources.

**Special protective equipment for fire-fighters**

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*The exact percentage (concentration) of composition has been withheld as a trade secret*
Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions:**
Remove all sources of ignition. Wear appropriate personal protection equipment (respirator, gloves, goggles, and/or faceshield, boots, protective clothing).

**For emergency responders:**
Use personal protective equipment as required.

**Environmental precautions**

See Section 12 for additional Ecological Information. Prevent further leakage or spillage if safe to do so.

**Methods and material for containment and cleaning up**

**Methods for containment:**
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods for cleaning up:**
Remove all sources of ignition. Collect spillage. Use only non-sparking tools. Dispose of in accordance with all national and local regulations.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling:**
Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves and eye/face protection. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing vapors or mists. Use only in well-ventilated areas.

**General hygiene considerations:**
Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

**Storage conditions:**
Keep out of the reach of children. Store in a well-ventilated place. Keep cool. No special restrictions on storage with other products.

**Materials to avoid**
Contact with highly reactive chemicals like strong acids, strong bases, oxidizers or reducing agents may cause a dangerous reaction.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure limits:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TWA</th>
<th>ACGIH STEL</th>
<th>ACGIH CEILING</th>
<th>ACGIH - Skin Absorption Designation</th>
</tr>
</thead>
</table>

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PMC1394C
1-Butanol
71-36-3

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA TWA</th>
<th>OSHA-Table Z-3</th>
<th>OSHA CEILING</th>
<th>OSHA - Skin Notations</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Butanol</td>
<td>100 ppm</td>
<td>300 mg/m³</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Derived No Effect Level (DNEL):**
No information available.

**Predicted No Effect Concentration (PNEC):**
No information available.

**Appropriate engineering controls**

**Engineering measures:**
Ensure adequate ventilation, especially in confined areas.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection:**
Avoid contact with eyes. Prevent eye contact by using protective eye wear appropriate for conditions of use. Wear safety glasses with side shields (or goggles).

**Hand protection:**
Follow label directions. Prevent skin contact by using protective gloves appropriate for the hazard presented by this substance.

**Skin and body protection:**
Follow label directions. Prevent skin contact by using protective clothing appropriate for the hazard presented by this substance.

**Respiratory protection:**
Follow label directions. Do not inhale aerosol. Respiratory protective equipment is not normally necessary when this product is used according to product label directions.

**General industrial hygiene practice:**
Where use conditions and/or extent and duration of exposure differ from typical household consumer use, appropriate protective equipment may be necessary to minimize exposures.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Clear</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Light yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Solvent, pungent</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>6.5 - 8.0</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>51.7 °C / 125 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability limit in air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Explosive properties: No information available
Oxidizing properties: No information available
Softening point: No information available
Molecular weight: No information available
VOC content (%): No information available
Density: No information available
Bulk density: No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available.

Chemical stability

Stability:
Stable under normal conditions.

Sensitivity to mechanical impact:
None.

Sensitivity to static discharge:
None.

Possibility of hazardous reactions

Contact with highly reactive chemicals like strong acids, strong bases, oxidizers or reducing agents may cause a dangerous reaction.

Conditions to avoid

Heat, flames and sparks. Keep out of reach of children.

Incompatible materials:

Not determined.

Hazardous decomposition products

Not determined.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Aggravated medical conditions: Exposure to this product may aggravate pre-existing skin, eye, and respiratory disorders.
Principle routes of exposure: Eye contact, skin contact, inhalation

**Inhalation:** May cause irritation of respiratory tract. May cause drowsiness or dizziness. See additional information below.

**Eye contact:** Avoid contact with eyes. Severely irritating to eyes.

**Skin contact:** Avoid contact with skin. Irritating to skin.

**Ingestion:** Harmful if swallowed. Ingestion of this product can cause irritation of the mouth and throat, upset stomach, nausea, vomiting and diarrhea.

**Further information:** Inhalation overexposure to n-butyl alcohol vapors and mists may cause headache, nausea, dizziness, drowsiness. Experimental animals exposed to n-butyl alcohol vapors experienced blood, kidney and liver effects. Similar effects in humans exposed to concentrations below the permissible exposure limit have not been noted. n-Butyl alcohol is skin absorbed. Dermal overexposure may result in the effects previously mentioned.

### Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), \alpha.-\omega.-(4-nonylphenyl)-.omega.-hydroxy-, branched 127087-87-0</td>
<td>= 1310 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1-Butanol 71-36-3</td>
<td>= 700 mg/kg (Rat) = 790 mg/kg (Rat)</td>
<td>= 3400 mg/kg (Rabbit) = 3402 mg/kg (Rabbit)</td>
<td>&gt; 8000 ppm (Rat) 4 h</td>
</tr>
<tr>
<td>Fatty acids, tall-oil 61790-12-3</td>
<td>= 7600 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### Information on toxicological effects

- **Symptoms:** No information available.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

- **Skin corrosion/irritation:** Irritating to skin.
- **Serious eye damage/eye irritation:** Risk of serious damage to eyes.
- **Sensitization:** No information available.
- **Germ cell mutagenicity:** None known.
- **Carcinogenicity:** None known.

### Reproductive toxicity

- **STOT - single exposure:** May cause respiratory irritation. May cause drowsiness or dizziness.
- **STOT - repeated exposure:** No information available.
- **Aspiration hazard:** No hazard from product as supplied.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

Toxic to aquatic life with long lasting effects

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
</table>
### Persistence and degradability

Readily biodegradable.

### Bioaccumulation

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poly(oxy-1,2-ethanediyl), .alpha.-((4-nonylphenyl)-.omega.-hydroxy-, branched 127087-87-0</td>
<td>2.1</td>
</tr>
<tr>
<td>1-Butanol 71-36-3</td>
<td>0.785</td>
</tr>
<tr>
<td>Fatty acids, tall-oil 61790-12-3</td>
<td>5.98</td>
</tr>
</tbody>
</table>

### Mobility in soil

No information available.

### Other adverse effects

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging:**

Dispose of in accordance with federal, state and local regulations.

**US EPA Waste Number**

D001

## 14. TRANSPORT INFORMATION

The listed transportation classification does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptions. Does not sustain combustion per ASTM D4206.

**DOT:**
15. REGULATORY INFORMATION

**EPA RCRA Hazardous Waste Classification:** D001

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>EPRCA (SARA title III) Section 313:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Butanol</td>
<td>1.0 % de minimis concentration</td>
</tr>
</tbody>
</table>

16. OTHER INFORMATION

**Key or legend to abbreviations and acronyms used in the safety data sheet**

- TWA - TWA (Time-Weighted Average)
- STEL - STEL (Short Term Exposure Limit)
- ACGIH (American Conference of Governmental Industrial Hygienists)
- EPA (Environmental Protection Agency)
- RCRA (Resource Conservation and Recovery Act)

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Prepared by: Access Business Group LLC, Environmental, Health and Safety Department, Ada, Michigan, U.S.A.
This data sheet contains changes from the previous version in section(s): Page Footer

***END OF SAFETY DATA SHEET***