



**Sponto AP 201 and Sponto AP 202**  
*General Purpose Emulsifiers*

**Products for Agriculture Formulation**

No warranties, expressed or implied, including warranties of merchantability or fitness for a particular use, are made with respect to the products described herein.  
Nothing contained herein shall constitute a permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent.



**DESCRIPTION:**

Both Sponto AP 201 and Sponto AP 202 are anionic and nonionic mixture.

**KEY FEATURES & BENEFITS:**

Sponto AP-201 & Sponto AP-202 general purpose emulsifiers are specially designed to meet the cost and performance challenges of Emulsifiable Concentrate formulations (EC). This new match pair proves to be versatile, shows good spontaneity, and demonstrates emulsion stability especially for Pyrethroids, Phenoxies, and Organophosphates.

**SPECIFICATIONS:**

|                             | Sponto AP-201 | Sponto AP-202 | Methods  |
|-----------------------------|---------------|---------------|----------|
| Appearance                  | Brown Liquid  | Brown liquid  | Visual   |
| Moisture, %                 | 0.6 max       | 0.6 max       | KL 510.0 |
| PH, 5% in Water/IPA (85/25) | 5.0-8.0       | 5.0-8.0       | KL 502.2 |

**TYPICAL PROPERTIES**

|                                     |       |       |          |
|-------------------------------------|-------|-------|----------|
| Specific Gravity, 25 deg C          | 1.040 | 1.060 | KL 321.7 |
| Flash Point (closed cup, ASTM 3278) | 46 °C | 64 °C | KL 343.8 |

**SOLUBILITY:**

|                 |   |             |
|-----------------|---|-------------|
| 10% in water    | : | Dispersible |
| 10% in IPA      | : | Soluble     |
| 10% in Xylene   | : | Soluble     |
| 10% in Kerosene | : | Soluble     |

**FORMULATION AND USE:**

Sponto AP-201 and Sponto AP-202 general purpose emulsifiers present versatility and can be used in different ratios that delivers optimum cost-performance benefit. Initial screening should include a dilution test of formulations made with various ratios of the emulsifiers at about 6% in the concentrate.

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**AKZO NOBEL**

Example : 10: 90      30:70,      50:50,      70:30      90:10

In general, excessive creaming in soft water or at low temperature is resolved by increasing the proportion of the lipophilic blend, while creaming or oiling in hard water or at high temperatures can be corrected by increasing the proportion of the hydrophilic blend. General weakness in all water or temperatures usually indicates that the level of emulsifiers in the concentrates needs to be increased.

#### **FORMULATION RECOMMENDATION**

| EC Formulation         | Sponto AP-201<br>(Wt.%) | Sponto Ap-202<br>(Wt.%)  | Solvent            |
|------------------------|-------------------------|--------------------------|--------------------|
| 2,4-D IBE 72%          | 2.0                     | 4.0                      | Solvesso 150       |
| BPMC 50%               | 0.6                     | 5.4                      | Solvesso 150       |
| Alachlor 50%           | 2.4                     | 3.6                      | Xylene             |
| Acetochlor 50%         | 1.8                     | 3.2                      | Xylene             |
| Acetachlor 90% EC      | 3.4                     | Witconol NS-500LQ<br>2.2 |                    |
| Bifenthrin 2.5%        | 2.7                     | 3.3                      | Solvesso 150       |
| Butachlor 50%          | 3.0                     | 3.0                      | Xylene             |
| Butachlor 90% EC       | 4.4                     | Witconol NS-500LQ<br>2.0 |                    |
| Carbosulfan 35%        | 3.0                     | 3.0                      | Solvesso 150       |
| Cypermethrin 5%        | 1.2                     | 2.8                      | Xylene             |
| Cypermethrin 35%       | 2.5                     | 2.5                      | Xylene             |
| Chlorpyrifos 40%       | 2.5                     | 3.5                      | Xylene             |
| Deltamethrin 2.5%      | 1.2                     | 2.8                      | Xylene             |
| Endosulfan 35%         | 1.2                     | 4.8                      | Xylene<br>ESBO, 2% |
| Fenpropathrin 20% EC   | 0.4                     | 4.6                      | Xylene             |
| Fenvalerate 20%        | 2.4                     | 3.6                      | Xylene             |
| Permethrin 2.5%        | 2.7                     | 3.3                      | Solvesso 150       |
| Triclopyr 30% EC       | 1.5                     | 3.4                      | kerosene           |
| Zata-Cypermethrin 2.5% | 2.7                     | 3.3                      | Solvesso 150       |

*Above recipes are developed in Crompton laboratory based on latest CIPAC test standards and can be used as a general formulation guide. Actual emulsifier dosage may vary depending on various factors that affect the formulation.*

#### **HANDLING, SAFETY, AND STORAGE:**

No warranties, expressed or implied, including warranties of merchantability or fitness for a particular use, are made with respect to the products described herein. Nothing contained herein shall constitute a permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent.



**AKZO NOBEL**

As with most chemicals, precautions should be taken while handling this product. Handling this product should be in keeping with normal safety practices. Refer to product MSDS for details. This product should be maintained between 40°F and 120°F for storage.

**OTHER INFORMATION:**

For Customer Service representatives, orders, samples, literature, MSDS, and product technical data sheets, please call 65-6771 5144 or any Akzo Nobel Surface Chemistry office in your location. For Technical Service questions, please call 65-6770-5170.

No warranties, expressed or implied, including warranties of merchantability or fitness for a particular use, are made with respect to the products described herein. Nothing contained herein shall constitute a permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent.



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Nothing contained herein shall constitute a permission or recommendation to practice any invention covered by a patent without a license from the owner of the patent.



# MATERIAL SAFETY DATA SHEET

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Product name: SPONTO AP-201

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SPONTO AP-201

Chemical name: Surfactant blend

Supplier: Akzo Nobel Industrial Specialties, Inc.  
300 South Riverside Plaza  
Chicago, IL 60606-6697, USA

Emergency telephone number: Akzo Nobel Emergency Response (24 hours) 914-693-6946  
CHEMTREC (24 hours) 800-424-9300

For MSDS, Product Safety, or regulatory inquiries, call: Mike Curl 713-434-4421

Customer Service: 877-948-2601

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT                      | CAS#         | CONCENTRATION |
|--------------------------------|--------------|---------------|
| Surfactant blend               | Trade secret | 73.0 %        |
| Butanol                        | 71-36-3      | 11.0 %        |
| Propylene glycol               | 57-55-6      | 11.0 %        |
| Light aromatic solvent naphtha | 64742-95-6   | <= 3.0 %      |
| 1,2,4-Trimethylbenzene         | 95-63-6      | 1.5 - 2.0 %   |
| Naphthalene                    | 91-20-3      | < 0.001 %     |
| Oxirane                        | 75-21-8      | < 0.001 %     |

## 3. HAZARDS IDENTIFICATION

APPEARANCE



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Product name: SPONTO AP-201

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|                |         |
|----------------|---------|
| Physical state | Liquid  |
| Color          | Amber   |
| Odor           | Solvent |

## EMERGENCY OVERVIEW

### WARNING!

COMBUSTIBLE LIQUID

CAUSES EYE AND SKIN IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.  
SEE SECTION 11 FOR INFORMATION ON CHRONIC HEALTH EFFECTS.  
SEE SECTION 7 OF THE MSDS FOR INFORMATION ON TRACE ETHYLENE OXIDE CONTENT.

## POTENTIAL HEALTH EFFECTS

### Swallowing

#### Acute effects

May be harmful if swallowed.

### Skin absorption

#### Acute effects

Harmful effects are not expected from short periods of contact.

### Inhalation

#### Acute effects

Vapor may cause irritation.

### Skin contact

#### Acute effects

Causes irritation.

### Eye contact

#### Acute effects

Causes moderate to severe irritation.

## POTENTIAL ENVIRONMENTAL EFFECTS

This product is expected to be moderately toxic to aquatic organisms.

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## 4. FIRST AID MEASURES

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### Swallowing

Obtain medical attention immediately.



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**Product name: SPONTO AP-201**

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### **Skin**

Immediately flush skin thoroughly with water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention if irritation persists.

### **Inhalation**

Remove to fresh air. Obtain medical attention if symptoms persist.

### **Eye contact**

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention.

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## **5. FIRE-FIGHTING MEASURES**

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**Flash point:** 47 °C (116 °F)

### **Special protective equipment for firefighters**

Use self-contained breathing apparatus when fighting fires in enclosed areas.

### **Extinguishing media**

**Suitable:** Extinguish with:

- water fog
- dry chemical
- CO<sub>2</sub>
- alcohol resistant foam
- water spray

**Unsuitable:** None.

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## **6. ACCIDENTAL RELEASE MEASURES**

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### **Personal precautions**

Wear suitable protective equipment.

### **Environmental precautions**

Avoid runoff to sewers or waterways. Product is dispersible in water. May be harmful to aquatic life.

### **Methods for cleaning up**

Absorb on inert material such as sand, earth, vermiculite.

Product is soluble in water.

Contain or minimize dispersion and collect if possible.

If not possible disperse residue to reduce aquatic harm.

Report per regulatory requirements.





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Product name: SPONTO AP-201

## 7. HANDLING AND STORAGE

### HANDLING

#### Handling precautions

Do not get in eyes, on skin, on clothing. Keep drums tightly closed to prevent contamination. Wear recommended personal protection equipment. Never use pressure to empty drums.

#### Other precautions

This product contains trace amounts of ethylene oxide, a condition which creates the potential for accumulation of ethylene oxide in the headspace of shipping and storage containers and in enclosed areas where the product is being handled or used. If this product is handled according to the recommendations in this MSDS, the presence of these trace amounts of ethylene oxide is not expected to result in any short term or long term hazard.

### STORAGE

#### Storage requirements

Causes eye irritation. Store at ambient temperature.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTION

#### Respiratory protection

None expected to be needed. A respirator approved for dust/fume or mist protection is recommended for mists, sprays or aerosols.

#### Hand protection / protective gloves

Neoprene

#### Eye protection

Splash-proof goggles

#### Skin protection

Rubber or plastic apron

#### Industrial hygiene measures

Remove contaminated clothing and clean it.

### ENGINEERING CONTROLS

#### Ventilation

General (mechanical) room ventilation is expected to be satisfactory for normal handling.

### EXPOSURE LIMITS

| <u>Component</u> | <u>Type</u> | <u>Value</u> | <u>Remark</u> |
|------------------|-------------|--------------|---------------|
|------------------|-------------|--------------|---------------|



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Product name: SPONTO AP-201

|                                            |                          |                                         |               |
|--------------------------------------------|--------------------------|-----------------------------------------|---------------|
| Butanol                                    | Ceiling (skin), OSHA     | 150.0 mg/m3<br>50.0 ppm                 |               |
|                                            | Ceiling (skin), ACGIH    | 50.0 ppm                                |               |
| <b>Component</b><br>1,2,4-Trimethylbenzene | <b>Type</b><br>TWA, OSHA | <b>Value</b><br>125.0 mg/m3<br>25.0 ppm | <b>Remark</b> |
|                                            | TWA, ACGIH               | 25.0 ppm                                |               |
| <b>Component</b><br>Naphthalene            | <b>Type</b><br>TWA, OSHA | <b>Value</b><br>50.0 mg/m3<br>10.0 ppm  | <b>Remark</b> |
|                                            | STEL, OSHA               | 75.0 mg/m3<br>15.0 ppm                  |               |
|                                            | TWA (skin), ACGIH        | 10.0 ppm                                |               |
|                                            | STEL, ACGIH              | 15.0 ppm                                |               |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

|                |         |
|----------------|---------|
| Physical state | Liquid  |
| Color          | Amber   |
| Odor           | Solvent |

### OTHER PROPERTIES

|                       |                                   |
|-----------------------|-----------------------------------|
| Boiling point         | Not determined                    |
| Melting point         | Not determined                    |
| pH                    | 5 - 7<br>Concentration:<br>50 g/l |
| Density               | 1.04 g/cm3 at 25 °C               |
| Vapor pressure        | Not determined                    |
| Vapor density (air=1) | Not determined                    |
| Solubility in water   | Dispersible                       |
| Flash point           | 47 °C (116 °F)                    |



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Product name: SPONTO AP-201

Method: Setaflash closed cup ASTM D 3828

Percent volatiles 16 %(m)

## 10. STABILITY AND REACTIVITY

**Stability:** Stable.

**Stability - Conditions to avoid**  
Stable under normal conditions.

**Incompatible materials**  
Strong oxidizing agents.

**Hazardous combustion products**  
Carbon monoxide.  
Carbon dioxide.  
Oxides of sulfur.

**Hazardous polymerization:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

|                                                                                                    |                                                         |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| <u>Component toxicology</u><br>Light aromatic solvent naphtha<br>Acute toxicity - Swallowing:      | LD50 - Rats<br>Result: 4,700 mg/kg                      |
| <u>Component toxicology</u><br>Butanol<br>Acute toxicity - Swallowing:                             | LD50 - Rats<br>Result: 2,500 mg/kg                      |
| <u>Component toxicology</u><br>Light aromatic solvent naphtha<br>Acute toxicity - Skin absorption: | LD50 - Rat<br>Result: > 4 ml/kg                         |
| <u>Component toxicology</u><br>Butanol<br>Acute toxicity - Skin absorption:                        | LD50 - Rabbit<br>Result: 4,200 mg/kg                    |
| <u>Component toxicology</u><br>Light aromatic solvent naphtha<br>Acute toxicity - Inhalation:      | LC50 - Rat<br>Result: > 3,670 ppm<br>Exposure time: 8 h |



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Product name: SPONTO AP-201

|                                                                                  |                                                        |
|----------------------------------------------------------------------------------|--------------------------------------------------------|
| <u>Component toxicology</u><br><b>Butanol</b><br>Acute toxicity - Inhalation:    | LC50 - Rats<br>Result: 8000 ppm<br>Exposure time: 4 h  |
| <u>Component toxicology</u><br><b>Butanol</b><br>Skin irritation - Skin contact: | Species: Rabbit<br>Result: Causes moderate irritation. |
| <u>Component toxicology</u><br><b>Butanol</b><br>Eye irritation - Eye contact:   | Species: Rabbit<br>Result: Severe irritation           |

## CARCINOGENICITY

### Assessment

Ethylene oxide is classified by the International Agency for Research on Cancer (IARC) as Group 1 - "human limited evidence, animal sufficient evidence"; by the National Toxicology Program (NTP) as a "known human carcinogen" and by the American Conference of Government Industrial Hygienists (ACGIH) as a "suspected human carcinogen". In a two year inhalation study, the National Toxicology Program (NTP) found there was clear evidence of carcinogenic activity of naphthalene in male and female rats based on increased incidences of respiratory epithelial adenoma and olfactory epithelial neuroblastoma of the nose. Naphthalene is classified by the International Agency for Research on Cancer (IARC) as Group 2B - "human inadequate evidence, animal sufficient evidence".

## 12. ECOLOGICAL INFORMATION

This product is expected to be moderately toxic to aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

**General:** It is our opinion this product is not a RCRA hazardous waste. It is the generator's responsibility to make their own determination as to the RCRA status of waste they generate. We have not performed a Toxicity Characteristic Leachate Procedure (TCLP) on this product. Incinerate in a furnace where permitted under appropriate Federal, State, and local regulations.

**Non-cleaned packages**  
Dispose of washing solution in the same way as product.

## 14. TRANSPORT INFORMATION

### DOT Classification

Not regulated by ground or rail if shipped or transported in containers less than 450 liters.

**Proper shipping name:** COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM SOLVENT, BUTANOL)



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Product name: SPONTO AP-201

Class: COMBUSTIBLE LIQUID  
UN ID #: NA 1993  
Packing group: III  
marine pollutant: (ALKYLBENZENESULPHONATES, BRANCHED OR STRAIGHT CHAIN)  
MARINE POLLUTANT  
Freight description road: ADJUVANTS, SPREADERS OR STICKERS

## IMDG Classification

Proper shipping name: Flammable liquid, n.o.s. (PETROLEUM SOLVENT, BUTANOL)  
Class: 3  
UN ID #: UN 1993  
Packing group: III  
Marpol name: (ALKYLBENZENESULPHONATES, BRANCHED OR STRAIGHT CHAIN)  
MARINE POLLUTANT

## ICAO Classification

Proper shipping name: FLAMMABLE LIQUID, N.O.S. (PETROLEUM SOLVENT, BUTANOL)  
Class: 3  
UN ID #: UN 1993  
Packing group: III

## 15. REGULATORY INFORMATION

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.

Components present in this product at a level which could require reporting under the statute are:

| Chemical name |                                    | CAS#    | Max weight % |
|---------------|------------------------------------|---------|--------------|
| Butanol       | RQ 5000 pounds<br>for butanol      | 71-36-3 | 11.00        |
| Oxirane       | RQ 10 pounds for<br>ethylene oxide | 75-21-8 | < 0.001      |
| Naphthalene   | RQ 100 pounds<br>for naphthalene   | 91-20-3 | < 0.001      |

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) in 40CFR355 (used for SARA 302 and 304).

Components present in this product at a level which could require reporting under the statute are:

| Chemical name | CAS#    | Max weight % |
|---------------|---------|--------------|
| Oxirane       | 75-21-8 | < 0.001      |

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

| Chemical name | CAS# | Max weight % |
|---------------|------|--------------|
|---------------|------|--------------|



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**Product name: SPONTO AP-201**

|                        |              |             |
|------------------------|--------------|-------------|
| Butanol                | 71-36-3      | 11.00       |
| 1,2,4-Trimethylbenzene | 95-63-6      | 1.50 - 2.00 |
|                        | Trade secret | 2.00        |

**Pennsylvania Right-To-Know Hazardous Substance List--Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.**

Components present in this product at a level which could require reporting under the statute are:

| Chemical name    | CAS#       | Max weight % |
|------------------|------------|--------------|
| Butanol          | 71-36-3    |              |
| Trimethylbenzene | 25551-13-7 |              |
| Propylene glycol | 57-55-6    |              |

**New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)**

| Chemical name                  | CAS#         | New Jersey TS Number       |
|--------------------------------|--------------|----------------------------|
| Light aromatic solvent naphtha | 64742-95-6   |                            |
| 1,2,4-Trimethylbenzene         | 95-63-6      |                            |
| Propylene glycol               | 57-55-6      |                            |
| Butanol                        | 71-36-3      |                            |
| Surfactant blend               | Trade secret | 136411-5931P, 136411-5026P |

**EPA Hazard Categories (SARA 311, 312):** Immediate Health Hazard  
Fire Hazard

## CHEMICAL INVENTORY

United States: The ingredients of this product are on the TSCA inventory.

## 16. OTHER INFORMATION

### RECOMMENDED USES AND RESTRICTIONS

Please consult the product and/or application information bulletins for this product.

### HMIS RATING

|           |                 |               |        |
|-----------|-----------------|---------------|--------|
| Health: 2 | Flammability: 2 | Reactivity: 0 | PPI: - |
|-----------|-----------------|---------------|--------|

### LEGEND

|          |                                   |
|----------|-----------------------------------|
| STP      | Standard temperature and pressure |
| W/W      | Weight/Weight                     |
| 0 (HMIS) | Minimal hazard                    |
| 1 (HMIS) | Slight hazard                     |
| 2 (HMIS) | Moderate hazard                   |
| 3 (HMIS) | Serious hazard                    |
| 4 (HMIS) | Severe hazard                     |



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**Product name: SPONTO AP-201**

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|          |                                                                               |
|----------|-------------------------------------------------------------------------------|
| X (HMIS) | Personal protection rating to be supplied by user depending on use conditions |
|----------|-------------------------------------------------------------------------------|

The opinions expressed herein are those of qualified experts within Akzo Nobel. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Akzo Nobel, it is the user's obligation to determine the conditions of safe use of the products.



# MATERIAL SAFETY DATA SHEET

Revision: 1.0  
06/07/2002  
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Product name: SPONTO AP-202

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SPONTO AP-202

Chemical name: Surfactant blend

Supplier: Akzo Nobel Industrial Specialties, Inc.  
300 South Riverside Plaza  
Chicago, IL 60606-6697, USA

Emergency telephone number: Akzo Nobel Emergency Response (24 hours) 914-693-6946  
CHEMTREC (24 hours) 800-424-9300

For MSDS, Product Safety, or regulatory inquiries, call: Mike Curl 713-434-4421

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT        | CAS#         | CONCENTRATION |
|------------------|--------------|---------------|
| Surfactant blend | Trade secret | 91.0 %        |
| Butanol          | 71-36-3      | 4.0 - 5.0 %   |
| Propylene glycol | 57-55-6      | 4.0 - 5.0 %   |
| Oxirane          | 75-21-8      | <0.001 %      |

## 3. HAZARDS IDENTIFICATION

### APPEARANCE

Physical state: Liquid  
Color: Amber  
Odor: Solvent





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Product name: SPONTO AP-202

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## EMERGENCY OVERVIEW

### WARNING!

COMBUSTIBLE LIQUID

CAUSES EYE AND SKIN IRRITATION.  
MAY BE HARMFUL IF SWALLOWED.  
SEE SECTION 7 OF THE MSDS FOR INFORMATION ON TRACE ETHYLENE OXIDE CONTENT.

## POTENTIAL HEALTH EFFECTS

### Swallowing

#### Acute effects

May be harmful if swallowed.

### Skin absorption

#### Acute effects

Harmful effects are not expected from short periods of contact.

### Inhalation

#### Acute effects

Vapor may cause irritation.

### Skin contact

#### Acute effects

Causes irritation.

### Eye contact

#### Acute effects

Causes moderate to severe irritation.

## POTENTIAL ENVIRONMENTAL EFFECTS

This product is expected to be moderately toxic to aquatic organisms.

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## 4. FIRST AID MEASURES

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### Swallowing

Obtain medical attention immediately.

### Skin

Immediately flush skin thoroughly with water for at least 15 minutes while removing contaminated clothing and shoes. Obtain medical attention if irritation persists.

### Inhalation

Remove to fresh air. Obtain medical attention if symptoms persist.



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Product name: SPONTO AP-202

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### Eye contact

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention.

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## 5. FIRE-FIGHTING MEASURES

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Flash point: 64 °C (148 °F)

### Special protective equipment for firefighters

Use self-contained breathing apparatus when fighting fires in enclosed areas.

### Extinguishing media

Suitable: Extinguish with:

- water fog
- dry chemical
- CO2
- alcohol resistant foam
- water spray

Unsuitable: None.

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## 6. ACCIDENTAL RELEASE MEASURES

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### Personal precautions

Wear suitable protective equipment.

### Environmental precautions

Avoid runoff to sewers or waterways. Product is dispersible in water. May be harmful to aquatic life.

### Methods for cleaning up

Absorb on inert material such as sand, earth, vermiculite.  
Product is soluble in water.  
Contain or minimize dispersion and collect if possible.  
If not possible disperse residue to reduce aquatic harm.  
Report per regulatory requirements.

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## 7. HANDLING AND STORAGE

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### HANDLING



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Product name: SPONTO AP-202

## Handling precautions

Do not get in eyes, on skin, on clothing. Keep drums tightly closed to prevent contamination. Wear recommended personal protection equipment. Never use pressure to empty drums.

## Other precautions

This product contains trace amounts of ethylene oxide, a condition which creates the potential for accumulation of ethylene oxide in the headspace of shipping and storage containers and in enclosed areas where the product is being handled or used. If this product is handled according to the recommendations in this MSDS, the presence of these trace amounts of ethylene oxide is not expected to result in any short term or long term hazard.

## STORAGE

### Storage requirements

Causes eye irritation. Store at ambient temperature.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### PERSONAL PROTECTION

#### Respiratory protection

None expected to be needed. A respirator approved for dust/fume or mist protection is recommended for mists, sprays or aerosols.

#### Hand protection / protective gloves

Neoprene

#### Eye protection

Splash-proof goggles

#### Skin protection

Rubber or plastic apron

#### Industrial hygiene measures

Remove contaminated clothing and clean it.

### ENGINEERING CONTROLS

#### Ventilation

General (mechanical) room ventilation is expected to be satisfactory for normal handling.

### EXPOSURE LIMITS

| <u>Component</u> | <u>Type</u>           | <u>Value</u>            | <u>Remark</u> |
|------------------|-----------------------|-------------------------|---------------|
| Butanol          | Ceiling (skin), OSHA  | 150.0 mg/m3<br>50.0 ppm |               |
|                  | Ceiling (skin), ACGIH | 50.0 ppm                |               |



## MATERIAL SAFETY DATA SHEET

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Product name: SPONTO AP-202

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

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#### APPEARANCE

|                |         |
|----------------|---------|
| Physical state | Liquid  |
| Color          | Amber   |
| Odor           | Solvent |

#### OTHER PROPERTIES

|                       |                                                            |
|-----------------------|------------------------------------------------------------|
| Boiling point         | Not determined                                             |
| Melting point         | Not determined                                             |
| pH                    | 5 - 7<br>Concentration:<br>50 g/l                          |
| Density               | 1.06 g/cm <sup>3</sup> at 25 °C                            |
| Vapor pressure        | Not determined                                             |
| Vapor density (air=1) | Not determined                                             |
| Solubility in water   | Dispersible                                                |
| Flash point           | 64 °C (148 °F)<br>Method: Setaflash closed cup ASTM D 3828 |
| Percent volatiles     | 4 - 5 %(m)                                                 |

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### 10. STABILITY AND REACTIVITY

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**Stability:** Stable.

**Stability - Conditions to avoid**

Stable under normal conditions.

**Incompatible materials**

Strong oxidizing agents.

**Hazardous combustion products**

Carbon monoxide.

Carbon dioxide.

Oxides of sulfur.

**Hazardous polymerization:** Will not occur.



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## 11. TOXICOLOGICAL INFORMATION

|                                                                                    |                                                        |
|------------------------------------------------------------------------------------|--------------------------------------------------------|
| <u>Component toxicology</u><br><b>Butanol</b><br>Acute toxicity - Swallowing:      | LD50 - Rats<br>Result: 2,500 mg/kg                     |
| <u>Component toxicology</u><br><b>Butanol</b><br>Acute toxicity - Skin absorption: | LD50 - Rabbit<br>Result: 4,200 mg/kg                   |
| <u>Component toxicology</u><br><b>Butanol</b><br>Acute toxicity - Inhalation:      | LC50 - Rats<br>Result: 8000 ppm<br>Exposure time: 4 h  |
| <u>Component toxicology</u><br><b>Butanol</b><br>Skin irritation - Skin contact:   | Species: Rabbit<br>Result: Causes moderate irritation. |
| <u>Component toxicology</u><br><b>Butanol</b><br>Eye irritation - Eye contact:     | Species: Rabbit<br>Result: Severe irritation           |

## CARCINOGENICITY

### Assessment

Ethylene oxide is classified by the International Agency for Research on Cancer (IARC) as Group 1 - "human limited evidence, animal sufficient evidence"; by the National Toxicology Program (NTP) as a "known human carcinogen" and by the American Conference of Government Industrial Hygienists (ACGIH) as a "suspected human carcinogen".

## 12. ECOLOGICAL INFORMATION

This product is expected to be moderately toxic to aquatic organisms.

## 13. DISPOSAL CONSIDERATIONS

**General:** It is our opinion this product is not a RCRA hazardous waste. It is the generator's responsibility to make their own determination as to the RCRA status of waste they generate. We have not performed a Toxicity Characteristic Leachate Procedure (TCLP) on this product. Incinerate in a furnace where permitted under appropriate Federal, State, and local regulations.

### **Non-cleaned packages**

Dispose of washing solution in the same way as product.



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## 14. TRANSPORT INFORMATION

### DOT Classification

Not regulated by ground or rail if shipped or transported in containers less than 450 liters.

**Proper shipping name:** COMBUSTIBLE LIQUID, N.O.S. (BUTANOL)  
**Class:** COMBUSTIBLE LIQUID  
**UN ID #:** NA 1993  
**Packing group:** III  
**marine pollutant:** (ALKYLBENZENESULPHONATES, BRANCHED OR STRAIGHT CHAIN)  
MARINE POLLUTANT  
**Freight description road:** CLEANING, SCOURING & WASHING COMPOUND, LIQUID OR POWDER

### IMDG Classification

**Proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(ALKYLBENZENESULPHONATES, BRANCHED AND STRAIGHT CHAIN)  
**Class:** 9  
**UN ID #:** UN 3082  
**Packing group:** III  
**Marpol name:** marine pollutant

### ICAO Classification

This product is not regulated by ICAO.

## 15. REGULATORY INFORMATION

Comprehensive Environmental Response Compensation and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of hazardous substances equal to or greater than the reportable quantities (RQ's) in 40CFR302.4.

Components present in this product at a level which could require reporting under the statute are:

| Chemical name |                                    | CAS#    | Max weight % |
|---------------|------------------------------------|---------|--------------|
| Butanol       | RQ 5000 pounds<br>for butanol      | 71-36-3 | 4.00 - 5.00  |
| Oxirane       | RQ 10 pounds for<br>ethylene oxide | 75-21-8 | < 0.001      |

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities (TPQ's) and release reporting based on Reportable Quantities (RQ's) in 40CFR355 (used for SARA 302 and 304).

Components present in this product at a level which could require reporting under the statute are:

| Chemical name |  | CAS#    | Max weight % |
|---------------|--|---------|--------------|
| Oxirane       |  | 75-21-8 | < 0.001      |



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Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual reports of release of toxic chemicals that appear in 40CFR372 (for SARA 313). This information must be included in MSDS's that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

| Chemical name | CAS#    | Max weight % |
|---------------|---------|--------------|
| Butanol       | 71-36-3 | 4.00 - 5.00  |

Pennsylvania Right-To-Know Hazardous Substance List--Hazardous Substances and Special Hazardous Substances on the list must be identified when present in products.

Components present in this product at a level which could require reporting under the statute are:

| Chemical name    | CAS#    | Max weight % |
|------------------|---------|--------------|
| Butanol          | 71-36-3 |              |
| Propylene glycol | 57-55-6 |              |

New Jersey Worker and Community Right-To-Know Act (Labeling Requirements)

| Chemical name    | CAS#         | New Jersey TS Number                     |
|------------------|--------------|------------------------------------------|
| Propylene glycol | 57-55-6      |                                          |
| Butanol          | 71-36-3      |                                          |
| Surfactant blend | Trade secret | 136411-5026P, 136411-5106P, 136411-5931P |

EPA Hazard Categories (SARA 311, 312): Immediate Health Hazard

## CHEMICAL INVENTORY

United States: The ingredients of this product are on the TSCA inventory.

## 16. OTHER INFORMATION

### RECOMMENDED USES AND RESTRICTIONS

Please consult the product and/or application information bulletins for this product.

### HMIS RATING

|           |                 |               |        |
|-----------|-----------------|---------------|--------|
| Health: 2 | Flammability: 2 | Reactivity: 0 | PPI: - |
|-----------|-----------------|---------------|--------|

### LEGEND

|          |                                   |
|----------|-----------------------------------|
| STP      | Standard temperature and pressure |
| W/W      | Weight/Weight                     |
| 0 (HMIS) | Minimal hazard                    |
| 1 (HMIS) | Slight hazard                     |
| 2 (HMIS) | Moderate hazard                   |
| 3 (HMIS) | Serious hazard                    |
| 4 (HMIS) | Severe hazard                     |



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|          |                                                                               |
|----------|-------------------------------------------------------------------------------|
| X (HMIS) | Personal protection rating to be supplied by user depending on use conditions |
|----------|-------------------------------------------------------------------------------|

The opinions expressed herein are those of qualified experts within Akzo Nobel. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of Akzo Nobel, it is the user's obligation to determine the conditions of safe use of the products.