



# SAFETY DATA SHEET

This Safety Data Sheet Complies With the Requirements of: 29 CFR 1910.1200

Revision Date: 08-Apr-2015

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** PHASE-SHIELD PS-605

### Other Means of Identification

**Product Code** PS-605

**UN/ID no** UN2924

### Recommended Use of the Chemical and Restrictions on Use

**Recommended Use** Emulsion Breaker.

### Details of the Supplier of the Safety Data Sheet

Aegis Chemical Solutions  
Corporate Headquarters  
4560 Kendrick Plaza Dr., Ste 190  
Houston, TX 77032  
Telephone: 281-258-4095

### Emergency Telephone Number

**Company Phone Number** 281-258-4095

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

### OSHA Regulatory Status

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Acute toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 1
Serious Eye Damage/Eye Irritation	Category 1
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 2

### Label Elements

#### Emergency Overview

Danger

**Hazard Statements**

Harmful if swallowed  
 Causes severe skin burns and eye damage  
 Suspected of damaging fertility or the unborn child  
 May cause drowsiness or dizziness  
 May cause damage to organs through prolonged or repeated exposure  
 May be fatal if swallowed and enters airways  
 Highly flammable liquid and vapor

**Color** Brown**Physical State** Liquid**Odor** Aromatic**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Wash face, hands and any exposed skin thoroughly after handling  
 Do not eat, drink or smoke when using this product  
 Do not breathe dust/fume/gas/mist/vapors/spray  
 Use only outdoors or in a well-ventilated area  
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking  
 Keep container tightly closed  
 Ground/bond container and receiving equipment  
 Use explosion-proof electrical/ventilating/lighting/spill-response/equipment  
 Use only non-sparking tools  
 Take precautionary measures against static discharge  
 Keep cool

**Precautionary Statements - Response**

Immediately call a POISON CENTER or doctor/physician  
 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  
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
 Immediately call a POISON CENTER or doctor/physician  
 Call a POISON CENTER or doctor/physician if you feel unwell  
 Rinse mouth  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Do NOT induce vomiting  
 In case of fire: Use CO<sub>2</sub>, dry chemical, or foam for extinction

**Precautionary Statements - Storage**

Store locked up  
 Store in a well-ventilated place. Keep container tightly closed

**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
- Harmful to aquatic life

Unknown acute toxicity

0% of the mixture consists of ingredient(s) of unknown toxicity.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Chemical Name	CAS No	Weight-%
Toluene	108-88-3	50
Dodecylbenzenesulfonic acid	27176-87-0	50

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

#### Description of First Aid Measures

<b>General Advice</b>	Immediate medical attention is required. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
<b>Eye Contact</b>	Keep eye wide open while rinsing. Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area.
<b>Skin Contact</b>	Wash off immediately with plenty of water. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Remove to fresh air. Call a physician or poison control center immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
<b>Ingestion</b>	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Remove from exposure, lie down. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately.
<b>Self-protection of the first aider</b>	Remove all sources of ignition.

#### Most Important Symptoms and Effects, Both Acute and Delayed

**Symptoms** No information available.

#### Indication of Any Immediate Medical Attention and Special Treatment Needed

**Note to Physicians** Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

#### Suitable Extinguishing Media

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

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

#### Specific Hazards Arising From the Chemical

The product causes burns of eyes, skin and mucous membranes. Flammable. Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes.

#### Explosion Data

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment and Emergency procedures**

**Personal Precautions** Evacuate personnel to safe areas. Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Environmental Precautions**

**Environmental Precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system.

**Methods and Material for Containment and Cleaning Up**

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Cleaning Up** Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. After cleaning, flush away traces with water.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling**

**Advice on Safe Handling** Ensure adequate ventilation, especially in confined areas. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment. All equipment used when handling the product must be grounded. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. In case of insufficient ventilation, wear suitable respiratory equipment. Use only with adequate ventilation and in closed systems.

**Conditions for Safe Storage, Including any Incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible Materials** Strong oxidizing agents. Strong acids. Chlorinated compounds. Incompatible with strong acids and bases. Incompatible with oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Toluene 108-88-3	TWA: 20 ppm	TWA: 200 ppm (vacated) TWA: 100 ppm (vacated) TWA: 375 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 560 mg/m <sup>3</sup> Ceiling: 300 ppm	IDLH: 500 ppm TWA: 100 ppm TWA: 375 mg/m <sup>3</sup> STEL: 150 ppm STEL: 560 mg/m <sup>3</sup>

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information** Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

### Appropriate Engineering Controls

**Engineering Controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual Protection Measures, Such as Personal Protective Equipment

**Eye/Face Protection** Tight sealing safety goggles. Face protection shield.

**Skin and Body Protection** No special technical protective measures are necessary. Wear protective gloves and protective clothing.

**Respiratory Protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Keep away from food, drink and animal feeding stuffs. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin, eyes or clothing. Take off all contaminated clothing and wash it before reuse. Wear suitable gloves and eye/face protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Physical State</b>	Liquid	<b>Color</b>	Brown
<b>Odor</b>	Aromatic		
<b>Odor Threshold</b>	No information available		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	< 2	
Melting Point/Freezing Point	No information available	
Boiling Point/Boiling Range	No information available	
Flash Point	15 °C / 59 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper Flammability Limit:	No information available	
Lower Flammability Limit:	1.4	
Vapor Pressure	23 mmHg	
Vapor Density	3.2	
Specific Gravity	0.970	
Water Solubility	Soluble in water	
Solubility in Other Solvents	No information available	
Partition Coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

### Other Information

**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

Stable under recommended storage conditions.

### Possibility of Hazardous Reactions

None under normal processing.

### Conditions to Avoid

Heat, flames and sparks. Exposure to air or moisture over prolonged periods.

### Incompatible Materials

Strong oxidizing agents. Strong acids. Chlorinated compounds. Incompatible with strong acids and bases. Incompatible with oxidizing agents.

### Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Carbon oxides.

## 11. TOXICOLOGICAL INFORMATION

### Information on Likely Routes of Exposure

**Product Information** Information given is based on available data of the components and the toxicology of similar products. The product has not been tested.

**Inhalation** Aspiration into lungs can produce severe lung damage. May cause drowsiness or dizziness. Inhalation of vapors in high concentration may cause irritation of respiratory system.

**Eye Contact** Contact with eyes may cause irritation.

**Skin Contact** Irritating to skin.

**Ingestion** Harmful if swallowed. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Toluene 108-88-3	= 2600 mg/kg ( Rat )	= 12000 mg/kg ( Rabbit )	= 12.5 mg/L ( Rat ) 4 h
Dodecylbenzenesulfonic acid 27176-87-0	= 1260 mg/kg ( Rat )	-	-

### Information on Toxicological Effects

**Symptoms** No information available.

### Delayed and Immediate Effects as Well as Chronic Effects From Short and Long-term Exposure

**Sensitization** No information available.  
**Germ Cell Mutagenicity** Not known to cause heritable genetic damage.  
**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Toluene 108-88-3	-	Group 3	-	-

*IARC (International Agency for Research on Cancer)  
 Not classifiable as a human carcinogen*

<b>Reproductive Toxicity</b> <b>Teratogenicity</b> <b>STOT - Single Exposure</b> <b>STOT - Repeated Exposure</b> <b>Chronic Toxicity</b>	Product is or contains a chemical which is a known or suspected reproductive hazard. Not known to cause birth defects or have a deleterious effect on a developing fetus. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure. Chronic exposure to corrosive fumes/gases may cause erosion of the teeth followed by jaw necrosis. Bronchial irritation with chronic cough and frequent attacks of pneumonia are common. Gastrointestinal disturbances may also be seen. Contains a known or suspected reproductive toxin. Avoid repeated exposure. Possible risk of irreversible effects. May cause adverse liver effects.
<b>Target Organ Effects</b> <b>Aspiration Hazard</b>	Central nervous system, Eyes, Kidney, Liver, Respiratory system, Skin. May be fatal if swallowed and enters airways.

### Numerical Measures of Toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	1697 mg/kg
ATEmix (dermal)	24000 mg/kg
ATEmix (inhalation-dust/mist)	25 mg/l
ATEmix (inhalation-vapor)	> 20 mg/l

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

0% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Chemical Name	Algae/Aquatic Plants	Fish	Crustacea
Toluene 108-88-3	433: 96 h Pseudokirchneriella subcapitata mg/L EC50 12.5: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	15.22 - 19.05: 96 h Pimephales promelas mg/L LC50 flow-through 12.6: 96 h Pimephales promelas mg/L LC50 static 5.89 - 7.81: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 14.1 - 17.16: 96 h Oncorhynchus mykiss mg/L LC50 static 5.8: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 50.87 - 70.34: 96 h Poecilia reticulata mg/L LC50 static 11.0 - 15.0: 96 h Lepomis macrochirus mg/L LC50 static 54: 96 h Oryzias latipes mg/L LC50 static 28.2: 96 h Poecilia reticulata mg/L LC50 semi-static	5.46 - 9.83: 48 h Daphnia magna mg/L EC50 Static 11.5: 48 h Daphnia magna mg/L EC50
Dodecylbenzenesulfonic acid 27176-87-0	29: 96 h Pseudokirchneriella subcapitata mg/L EC50	3.5 - 10: 96 h Brachydanio rerio mg/L LC50 static 10.8: 96 h Oncorhynchus mykiss mg/L LC50 static	5.88: 48 h Daphnia magna mg/L EC50

### Persistence and Degradability

No information available.

### Bioaccumulation

No information available.

Chemical Name	Partition Coefficient
Toluene 108-88-3	2.65

### 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**

Do not reuse container. Empty drums should be completely drained properly bunged and promptly returned to a drum reconditioner, or properly disposed.

**US EPA Waste Number**

U220 D001, D002.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Toluene 108-88-3	U220	Included in waste streams: F005, F024, F025, F039, K015, K036, K037, K149, K151	-	U220

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Toluene 108-88-3	-	-	Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	-

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Toluene 108-88-3	Toxic Ignitable

**14. TRANSPORT INFORMATION**

**DOT**

**UN/ID no** UN2924  
**Proper Shipping Name** Flammable liquids, corrosive, n.o.s (contains toluene, dodecylbenzenesulfonic acid)  
**Hazard Class** 3  
**Subsidiary Class** 8  
**Packing Group** II

**Quantity Dependent Shipping Descriptions**

**Quantity** < 250 gallons  
**DOT Description** UN2924, Flammable liquids, corrosive, n.o.s, (contains toluene, dodecylbenzenesulfonic acid), 3 (8), PG II

**Quantity** >= 250 gallons  
**DOT Description 2** UN2924, Flammable liquids, corrosive, n.o.s, (contains toluene, dodecylbenzenesulfonic acid), 3 (8), PG II, RQ (toluene, dodecylbenzenesulfonic acid)



## 15. REGULATORY INFORMATION

### International Inventories

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	SARA 313 - Threshold Values %
Toluene - 108-88-3	1.0

#### SARA 311/312 Hazard Categories

<b>Acute Health Hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire Hazard</b>	Yes
<b>Sudden Release of Pressure Hazard</b>	No
<b>Reactive Hazard</b>	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Toluene 108-88-3	1000 lb	X	X	X
Dodecylbenzenesulfonic acid 27176-87-0	1000 lb	-	-	X

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Toluene 108-88-3	1 lb	-	RQ 1 lb final RQ RQ 0.454 kg final RQ

Dodecylbenzenesulfonic acid 27176-87-0	1000 lb	-	RQ 1000 lb final RQ RQ 454 kg final RQ
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**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Toluene - 108-88-3	Developmental Female Reproductive

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Toluene 108-88-3	X	X	X
Dodecylbenzenesulfonic acid 27176-87-0	X	X	X

**U.S. EPA Label Information****16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	<b>Health Hazards</b> 3	<b>Flammability</b> 3	<b>Instability</b> 0	<b>Physical and Chemical Properties</b> -
<b>HMIS</b>	<b>Health Hazards</b> 3	<b>Flammability</b> 3	<b>Physical Hazards</b> 0	<b>Personal Protection</b> X

Revision Date: 08-Apr-2015

**Revision Note:**

This SDS was updated to comply with the 2012 OSHA Hazard Communication Standard.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**