

# CA2816 CP/USP Glycerine – 99.5%

## Safety Data Sheet



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

#### 1.1 Product identifier

Product type : Mixture  
Trade name : CA2816 CP/USP Glycerine – 99.5%  
Label name : CA2816 CP/USP Glycerine – 99.5%  
Chemical name : Glycerin.  
CAS number : 56-81-5  
EC number : 200-289-5

#### 1.2 Recommended and restricted uses of the substance or mixture

Recommended uses : Industrial, lubricants, personal care, food additives, surfactants.  
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) : None  
GHS physical hazard : None.  
GHS health hazard : None.  
GHS environmental hazard : None.

#### 2.2 Label warnings of the substance or mixture

Signal word : None  
Hazard statements : None  
Precautionary statements : None  
Hazard symbol (pictogram) : None

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### 2.3 Hazards not otherwise classified

Other hazards : No additional information available.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Common name	Percent	CAS number	Health hazard
Not applicable.				

### 3.2 Mixtures

Chemical name	Common name	Typical %	CAS number	Health hazard
Glycerin	Glycerin	99.5 – 99.7	56-81-5	Target organ (NIOSH)
Water	Water	0.3 - 0.5	7732-18-5	None

## SECTION 4: First-aid measures

### 4.1 Description of first-aid measures

Exposure route	First-aid measure
Inhalation	: Remove the victim into fresh air. Observe victim's breathing. If breathing is labored seek immediate medical attention.
Skin contact	: Wash immediately with soap and water. If irritation develops, seek medical attention. Launder contaminated clothing.
Eye contact	: Rinse immediately with plenty of water for 15 minutes. Remove contact lenses if present and easy to do. If irritation occurs, seek immediate medical (ophthalmologist) attention.
Ingestion	: Rinse mouth with plenty of water. For ingestion of large quantities seek immediate medical attention. Do not induce vomiting. Contact poison control center.

### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms after inhalation	: May experience dizziness and headache. : Irritation of the nose and throat.
Symptoms after skin contact	: Mild irritation of the skin may occur.
Symptoms after eye contact	: Mild irritation of the eye tissue may occur. : May cause corneal inflammation.
Symptoms after ingestion	: May cause nausea and vomiting.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment after inhalation	: If breathing is labored seek immediate medical attention.
Treatment after skin contact	: If skin irritation occurs seek immediate medical attention.

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Treatment after eye contact : If eye irritation occurs seek immediate ophthalmologist attention.  
 Treatment after ingestion : If ingestion of a large quantity seek immediate poison control center.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable media : Carbon dioxide and alcohol resistant foam.  
 Unsuitable media : Water or foam may cause frothing.

#### 5.2 Specific hazards arising from the substance or mixture

Direct fire hazard : Not flammable.  
 Indirect fire hazard : Exposure to temperature above the flash point (177°C).  
 Explosive hazard : Exposure to temperature above the flash point (177°C).  
 Reactivity : Reactivity with strong oxidizers. Also refer to subsection 7.2.  
 Combustion products : Carbon dioxide, carbon monoxide and acrolein.

#### 5.3 Special protective equipment and precautions for fire-fighters

Protective equipment : Full protective clothing.  
 : Self contained breathing apparatus.  
 Precautions : Per NIOSH glycerin mist is hazardous (target organs: eyes, skin, respiratory system, kidneys).  
 : OSHA TWA 15 mg/m3 respirable fraction as total dust (mist).  
 : Inhalation may cause severe injury. Effects of inhalation may be delayed.  
 : Glycerin may decompose upon heating to produce toxic fumes.  
 : Isolate spill or leak area in all directions for at least 50 meters.  
 : If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters in all directions.  
 Emergency response guide : ERG 154.

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : 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 self contained breathing apparatus.  
 Emergency procedures : Mark the spill area with hazard tape or cones. Contain the spill area with suitable absorbent. Keep away from streams, rivers and lakes. If mixture is a mist, alert immediate neighborhood to close windows and doors. Contain and dissipate mist via spraying with water or alcohol resistant foam.

#### 6.2 Environmental precautions

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Precautions : Keep out of streams, rivers and lakes. Mixture is regulated as oil under the Clean Water Act. 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 sand, clay, chemical absorbent and carbon.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Handling temperature : About 20 - 30°C above the melt point (18°C).

Handling equipment : Rubber hoses, aluminum 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.

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

Incompatibilities : Oxidizers. Glycerin also is incompatible with hydrogen peroxide, potassium permanganate, nitric acid + sulfuric acid, perchloric acid + lead oxide, acetic anhydride, aniline + nitrobenzene, Ca(OC1)2, CrO3, F2 + PbO, KMnO4, K2O2, AgClO4 and NaH. A mixture with chlorine explodes if heated to 158-176°F. It reacts with acetic acid, potassium peroxide, sodium peroxide, hydrochloric acid, (HClO4 + PbO) and Na2O2. Contact with potassium chlorate may be explosive. It also reacts with ethylene oxide, perchloric acid, nitric acid + hydrofluoric acid and phosphorus triiodide.

## SECTION 8: Exposure controls/personal protection

### 8.1 Exposure controls

OSHA PEL : TWA 5 mg/m3.  
: TWA 15 mg/m3 respirable fraction.

ACGIH TLV : TWA 10 mg/m3.

NIOSH REL : TWA 10 mg/m3 (default value).

### 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.

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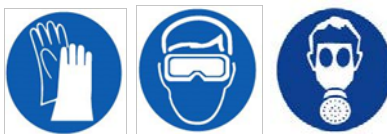
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### 8.3 Personal protection equipment

Personal protective equipment : Rubber gloves and safety glasses. Self contained breathing apparatus if mist exists.

Personal protective equipment pictograms :



## SECTION 9: Physical and chemical properties

### 9.1 Physical and chemical properties

Appearance : Colorless liquid.  
Odor : Odorless.  
Odor threshold : Substance is odorless.  
pH : 7.  
Melting point : 18°C.  
Boiling point : 290°C.  
Flash point : 182.2°C at 20 mm Hg.  
Evaporation rate : 177°C. Open Cup.  
Evaporation rate : No data available.  
Flammability : Not flammable.  
Lower flammability limit : 0.9% by volume.  
Upper flammability limit : No data available.  
Vapor pressure : 1.68x10<sup>-4</sup> mm Hg at 25°C.  
Vapor pressure : 25x10<sup>-3</sup> mm Hg at 50°C.  
Vapor density : 3.17 (air = 1).  
Relative density : 1.2613 g/cm<sup>3</sup> at 20°C.  
Solubility : Complete in water.  
Partition coefficient for n-octanol/water : Log Kow = -1.76.  
Auto-ignition temperature : 393°C.  
Decomposition temperature : 290°C.  
Viscosity : 954 mPas (cps) at 25°C.

### 9.2 Other information

Other information : No additional information available.

## SECTION 10: Stability and reactivity

Reactivity : May react violently with oxidizers.  
Chemical stability : Stable under storage conditions.  
Possibility of hazardous : Hazardous polymerization does not occur.

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reactions

Conditions to avoid : Pressure, shock, static discharge or vibration does NOT result in a hazardous condition.

Incompatible materials : Oxidizers. Also refer to subsection 7.2 for a complete list of incompatible materials.

Hazardous decomposition products : Carbon dioxide, carbon monoxide and acrolein.

### SECTION 11: Toxicological information

#### 11.1 Information on the likely routes of exposure

Inhalation exposure : From mist.  
 Skin exposure : From mist or splashing.  
 Ingestion exposure : Not a likely route of exposure.  
 Eye contact : From mist or splashing.

#### 11.2 Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Labored breathing, shortness of breath and coughing may occur.  
 Skin contact : Mild skin irritation may occur.  
 Ingestion : Irritation of the mouth, tongue or throat may occur.  
 Eye contact : 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 12600 mg/kg.  
 : Rat 5570 mg/kg.  
 : Rabbit 27000 mg/kg.  
 : Mouse 4100 mg/kg.  
 Skin LD50 : Rabbit > 18700 mg/kg 8 hour exposure.  
 Ingestion LD50 : Humans 14 subjects ingested 24000 mg/kg per day for 50 days with no observable effects.  
 Inhalation LD50 : Rat > 570 mg/m<sup>3</sup>/hour.  
 Skin primary irritation : Rabbit 0.5 ml undiluted for 24 hours produced no irritation.  
 Eye primary irritation : Rabbit 0.1 ml undiluted for 7 days produced no irritation.

#### 11.5 Carcinogenicity

National Toxicology Program : Not listed.  
 International Agency for : Not listed.

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Research on Cancer

OSHA : Not listed.  
NIOSH : Not listed.

### 11.6 Other toxicological information

Reproductive toxicity : Not classified.  
Germ cell mutagenicity : Not classified.  
Respiratory or skin sensitization : Not classified.  
Specific target organ toxicity, single exposure : Respiratory system, kidneys, eyes and skin (per NIOSH).  
Specific target organ toxicity, repeated exposure : Respiratory system, kidneys, eyes and skin (per NIOSH).  
Aspiration hazard : No data available.

## SECTION 12: Ecological information

### 12.1.1 Ecotoxicity aquatic

Fish LC50 : > 5000 mg/l 24 hour goldfish.  
Daphnia EC50 : > 10000 mg/l 24 hour.  
Rotifer EC50 : No data available.  
Algae EC50 : NOEC 2900 mg/l.

### 12.1.2 Ecotoxicity terrestrial

Ecotoxicity terrestrial : No data available.

### 12.2 Persistence and degradability

Water : 82% 5 day BOD (activated sludge).  
: Readily degradable.  
Soil : Koc = 1.  
: Mobile.  
Air : 7 hour half life.

### 12.3 Bio-accumulative potential

Log Kow : -1.76.  
: This substance does not have a potential to bio-concentrate.

### 12.4 Mobility in soil

Surface tension : Air 63 dyne/cm.  
Soil mobility : Koc = 1.  
: Mobile.

### 12.5 Results of PBT and vPvB assessment

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PBT and vPvB assessment : No data available.

### 12.6 Other adverse effects

Air : Not dangerous to the ozone layer.  
Water : Mild pollutant to 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.  
Empty package residues : Dispose only in accordance with local, state and federal regulations.  
: Remove package to an approved package cleaning and recycling facility.  
Transport trailer residues : Dispose only in accordance with local, state and federal regulations.  
: Clean transport trailer at an approved cleaning facility.  
: Disposal 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)

Classification	Regulation	Listed	Hazardous waste number
Ignitability	40CFR261.21	No	
Corrosivity	40CFR261.22	No	
Reactivity	40CFR261.23	No	
Toxicity	40CFR261.24	No	





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CERCLA (40CFR302.4) : Not listed.  
 California proposition 65 : Not listed.  
 German WGK class : 1 (low hazard to waters).

**15.1.2 Chemical inventories**

TSCA USA : Listed.  
 AICS Australia : Listed.  
 DSL Canada : Listed.  
 EC Europe : Listed.  
 ECL Korea : Listed.  
 IECS 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**

	Health	Flammability	Physical hazards	Instability
HMIS (USA)	1	1	0	
NFPA (USA)	1	1		0

**16.2 Safety Data Sheet information**

Revision date (MM/DD/YY) : 03/25/2015  
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**16.3 Notice to reader**

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