

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

### 1.1 Product identifier

Product type : Mixture

Trade name : CA2812 CP/USP Glycerine – 96% Label name : CA2815 CP/USP Glycerine – 96%

Chemical name : Glycerine.

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 : None

Appendix A)

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	96	56-81-5	Target organ (NIOSH)
Water	Water	4	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. : Mild irritation of the skin may occur.

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 (199°C).

Explosive hazard : Exposure to temperature above the flash point (199°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(OCl)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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### 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

: Colorless liquid. **Appearance** 

Odor : Odorless.

Odor threshold : Substance is odorless.

Hq :7. Melting point :18°C. :171°C. **Boiling point** 

: 177°C. Open Cup. Flash point Evaporation rate : No data available. Flammability : Not flammable. Lower flammability limit : 0.9% by volume. Upper flammability limit : No data available.

Vapor pressure : 1.68x10-4 mm Hg at 25°C.

: 25x10-3 mm Hg at 50°C.

Vapor density : 3.1 (air = 1).Relative density : 1.2517 at 25°C. Solubility : Complete in water. Partition coefficient for : Log Kow = -1.76.

n-octanol/water

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**

: May react violently with oxidizers. Reactivity : Stable under storage conditions. Chemical stability

: Hazardous polymerization does not occur. Possibility of hazardous

reactions

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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/m3/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.

Research on Cancer

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**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

Specific target organ toxicity,

repeated exposure

Aspiration hazard

: Respiratory system, kidneys, eyes and skin (per NIOSH).

: Respiratory system, kidneys, eyes and skin (per NIOSH).

: No data available.

### **SECTION 12: Ecological information**

### 12.1.1 Ecotoxicity aquatic

Fish LC50 :> 5000 mg/l 24 hour goldfish. : > 10000 mg/l 24 hour. Daphnia EC50 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.

:7 hour half life. Air

### 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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### CA2812 CP/USP Glycerine – 96%

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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.

: Dispose only in accordance with local, state and federal regulations.

Empty package residues : Remove package to an approved package cleaning and recycling

facility.

: Dispose only in accordance with local, state and federal regulations.

Transport trailer residues : Clean transport trailer at an approved cleaning facility.

: 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	

### **SECTION 14: Transport information**

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14.1 UN number

UN number : None.

14.2 UN proper shipping name

Proper shipping name : None.

14.3 Transport hazard class

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

14.4 Packing group

Packing group : None.

14.5 Environmental hazards

Marine pollutant : Not listed.

14.6 Transport in bulk

US DOT : Not regulated.

IMDG : Not regulated.

IATA : Not regulated.

MARPOL 73/78 : Not regulated.

IBC code : Not regulated.

14.7 Special precautions for user

Special precautions: No additional information available.

**SECTION 15: Regulatory information** 

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

15.1.1 US regulations

SARA 302 (40CFR355) : Not listed.

SARA 311/312 (40CFR370.66) : Immediate (acute) health hazard. Target organ (NIOSH).

: Delayed (chronic) health hazard. Target organ (NIOSH).

SARA 313 (40CFR372.65) : Not listed.
CERCLA (40CFR302.4) : Not listed.
California proposition 65 : Not listed.

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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. **IECSC China** : Listed. **ENCS Japan** : Listed. NzloC New Zealand : Listed. PICCS Philippines : Listed. SWISS Switzerland : Listed.

### 15.2 Chemical safety assessment

Safety assessment : No additional information available.

### **SECTION 16: Other information**

### 16.1 Hazard ratings

	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) : 06/01/2015 Supersede date (MM/DD/YY) : 10/29/2009

### 16.3 Notice to reader

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

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