

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

1.1 Product identifier

Product type : Mixture

Trade name : CA5016 C1218 Alcohol Label name : CA5016 C1218 Alcohol

Chemical name : Dodecanol, tetradecanol, hexadecanol and octadecanol.

CAS number : 67762-25-8 EC number : 267-006-5

1.2 Recommended and restricted uses of the substance or mixture

Recommended uses : Industrial, cleaners, surfactants, textile additives.

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 : Eye irritation category 2B. Appendix A) : Acute skin toxicity category 5.

GHS physical hazard : None.

GHS health hazard : Eye irritation category 2B.

: Acute skin toxicity category 5.

GHS environmental hazard : Acute aquatic toxicity category 1.

2.2 Label warnings of the substance or mixture

Signal word : Warning.

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Hazard statements : H316 Causes mild skin irritation.

: H320 Causes eye irritation.

: H400 Very toxic to aquatic life.

Precautionary statements : P264 Wash hands thoroughly after handling.

: P273 Avoid release to the environment.

: P280 Wear protective gloves/protective clothing/eye protection. : P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue

rinsing.

: P332+313: If skin irritation occurs get medical advice/attention. : P337+313: If eye irritation persists get medical advice/attention.

: P391 Collect spillage.

: P501 Dispose of contents/container to an approved disposal facility

only in accordance with local, state and federal regulations.

Hazard symbol (pictogram)



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
n-Dodecanol	Lauryl alcohol	48 - 58	112-53-8	Skin and eye irritant
n-Tetradecanol	Myristyl alcohol	18 - 24	112-72-1	Skin and eye irritant
n-Hexadecanol	Cetyl alcohol	8 - 12	36653-82-4	None
n-Octadecanol	Stearyl alcohol	11 - 15	112-92-5	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

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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 persists, 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 eye contact : Irritation of the eye tissue.

: May cause corneal inflammation.

Symptoms after ingestion : Mild tingling of the tongue and mouth.

: May cause gastrointestinal irritation, 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 persists seek immediate medical attention.

Treatment after eye contact : If eye irritation persists 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

Symptoms after skin contact

Suitable media : Carbon dioxide, alcohol resistant foam and water spray.

Unsuitable media : None known.

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 (135°C). Explosive hazard : Exposure to temperature above the flash point (135°C).

Reactivity : Reactivity with strong oxidizers.

Combustion products : Carbon dioxide and carbon monoxide.

5.3 Special protective equipment and precautions for fire-fighters

Protective equipment : Full protective clothing.

: Self contained breathing apparatus.

: Material will burn, but not ignite readily.

Precautions : Material will burn, but not ignite readily.

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: Inhalation of material may be harmful. Contact may cause burns to

skin and eyes.

: Fire may produce irritating, corrosive and/or toxic gases.

: Runoff from fire control may cause pollution.

Emergency response guide : ERG 171.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Mixture is an irritant. 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 dust mask or self contained breathing

apparatus.

Emergency procedures : As an immediate precautionary measure, isolate spill or leak area in

all directions for at least 50 meters. Mark the spill area with hazard tape or cones. Contain the spill area with suitable absorbent (dry earth, sand, clay, chemical absorbent, vermiculite and carbon). : 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.

6.2 Environmental precautions

Precautions : Keep out of streams, rivers and lakes. Mixture is very toxic to aquatic

organisms. 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 dry earth, sand, clay, chemical

absorbent, vermiculite and carbon.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handling temperature : About 10 - 20°C above the melt point (20 - 23°C).

Handling equipment : Rubber hoses, aluminum, carbon steel 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

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contain any spills. Protect from heat.

Packaging materials : Polyethylene, aluminum, carbon steel, stainless steel (grade 304),

rubber lined or epoxy lined tanks or drums. Graphite or rubber

gaskets

Incompatibilities : Strong oxidizers, inorganic acids and halogens.

SECTION 8: Exposure controls/personal protection

8.1 Exposure controls

OSHA PEL : None.
ACGIH TLV : None.
NIOSH REL : None.

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.

8.3 Personal protection equipment

Personal protective equipment

Personal protective equipment

pictograms

: Rubber gloves and safety glasses. Dust mask if mist exists.







SECTION 9: Physical and chemical properties

9.1 Physical and chemical properties

Appearance : Clear, colorless liquid.
Odor : Mild sweet pungent odor.
Odor threshold : 7.1 PPB (n-dodecanol).

pH : No data available. Mixture is not readily soluble in water.

Melting point : 20 - 23°C range.

Boiling point : 274° C

Flash point : 135°C, Pensky Marten Closed Cup.

Evaporation rate : No data available.
Flammability : Not flammable.
Lower flammability limit : ~1% by volume
Upper flammability limit : ~8% by volume

Vapor pressure : <0.01mm Hg at 25°C

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Vapor density : 7.8 (air = 1).

Relative density : 0.83 at 25/25 (water).

Solubility : Complete in ethanol and acetone.

: 4 mg/l at 25°C in water (n-dodecanol).

: 0.02 mg/l at 25 $^{\circ}\text{C}$ in water (n-tetradecanol).

Partition coefficient for

n-octanol/water

:Log Kow = 6.03 at 25°C (n-tetradecanol).

Auto-ignition temperature : No data available.

Decomposition temperature : No data available.

Viscosity : No data available.

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

reactions

Conditions to avoid

: Hazardous polymerization does not occur.

: Pressure, shock, static discharge or vibration does NOT result in a

hazardous condition.

Incompatible materials : Oxidizers, inorganic acids and halogens. Hazardous decomposition : Carbon dioxide and carbon monoxide.

products

SECTION 11: Toxicological information

11.1 Information on the likely routes of exposure

Inhalation exposure : From mist or spray.

Skin exposure : From mist or spray. From splashing. Ingestion exposure : Not a likely route of exposure.

Eye contact : From mist or spray. From splashing.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : Labored breathing and irritation of the lungs may occur.

Skin contact : Mild skin irritation may occur.

Ingestion : Mild irritation of the mouth, tongue, esophagus and stomach may

occur.

Eye contact : Mild eye irritation may occur.

11.3 Delayed and immediate effects and also chronic effects from short and long term exposure

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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 > 20000 mg/kg.
Skin LD50 : Rabbit 8000 mg/kg.
Ingestion LD50 : No data available.
Inhalation LD50 : No data available.

Skin primary irritation : Rabbit 4.6 (8.0 maximum score). Eye primary irritation : Rabbit 27 (110 maximum score).

: Corneal opacity occurred.

11.5 Carcinogenicity

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

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 : No data available.

Specific target organ toxicity, : No data available.

single exposure

Specific target organ toxicity,

repeated exposure

: No data available.

Aspiration hazard : No data available.

SECTION 12: Ecological information

12.1.1 Ecotoxicity aquatic

Fish LC50 : 1.01 mg/l 96 hour fathead minnow (n-dodecanol).

: 894.5 mg/l 96 hour blue gill (mixture).

: Acute category 1.

Daphnia EC50 : 0.77 mg/l 48 hour daphnia magna (n-dodecanol).

: Acute category 1.

Rotifer EC50 : 0.72 mg/l 48 hour brachionus calyciflorus (n- dodecanol).

: Acute category 1.

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Algae EC50 : 0.62 mg/l 96 hour green algae (n-dodecanol).

: 0.77 mg/l 72 hour green algae (n-dodecanol).

: Acute category 1.

12.1.2 Ecotoxicity terrestrial

Ecotoxicity terrestrial : No data available.

12.2 Persistence and degradability

Water : 75% 46 days OECD 301B (n-dodecanol).

:50% 5.5 days (n-tetradecanol).

: Readily degradable.

Soil : Koc = 15,000 (estimated for n-dodecanol).

: Koc = 45,000 (estimated for n-tetradecanol).

: Immobile.

Air : 21 hour half life (estimated for n-dodecanol).

: 18 hour half life (estimated for n-tetradecanol).

12.3 Bio-accumulative potential

Log Kow : 5.13 at 30 C (n-dodecanol).

: 6.03 at 25 C (n-tetradecanol).

: The mixture has a potential to bio-concentrate.

12.4 Mobility in soil

Surface tension : Air 0.029493 N/m (n-dodecanol).

Soil mobility : Koc =15,000 (estimated for n-dodecanol).

: Koc = 45,000 (estimated for n-tetradecanol).

: Immobile.

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment : No data available.

12.6 Other adverse effects

Air : Not dangerous to the ozone layer. Water : Mild pollutant to surface of water.

: Bio-accumulative.

SECTION 13: Disposal considerations

13.1 Description of waste residues

Storage tank residues : Liquid residue from tank cleaning.

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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

14.1 UN number

UN number : 3082.

14.2 UN proper shipping name

Proper shipping name : Environmentally hazardous substances, liquid, n.o.s.

: (dodecanol and tetradecanol).

14.3 Transport hazard class

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Hazard class : 9.

Hazard label : Environmentally hazardous substances, liquid, n.o.s.

Hazard pictogram



14.4 Packing group

Packing group : III.

14.5 Environmental hazards

Marine pollutant : Listed, per 49CFR172.101 Appendix B.

14.6 Transport in bulk

US DOT : Regulated subject to the provisions. IMDG : Regulated subject to the provisions. IATA : Regulated subject to the provisions. MARPOL 73/78 : Regulated subject to the provisions.

IBC code : IB3

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. Irritant.

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

German WGK class : 2 (hazard to waters).

15.1.2 Chemical inventories

TSCA USA : Listed.

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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 : Unknown.

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)	2	1	0	
NFPA (USA)	1	1		0

16.2 Safety Data Sheet information

Revision date (MM/DD/YY) : 05/12/2015 Supersede date (MM/DD/YY) : 11/13/2010

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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