Safety Data Sheet

AlbaChem® D-Grade

SECTION 1: Identification

Product form:	Mixture
Product name:	D-Grade **Date revised: 9/22/26**
Item No:	**4015, 4016, 4017, 4018,4019**
Supplier Information:	ALBATROSS USA 36-41 36th Long Island City, NY 11106,
Telephone:	718-392-6272
Emergency number:	Spill, leak, fire, exposure or accident – Call CHEMTREC – Day or Night 1-800-424-9300 or 1-703-527-3887 (USA & Canada) 01-800-681-9531 (México)

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

GHS US classification

Flammable liquids Category 4	H227	Combustible liquid
Acute toxicity (oral) Category 4	H302	Harmful if swallowed
Acute toxicity (inhalation:dust,mist) Category 4	H332	Harmful if inhaled
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2	H319	Causes serious eye irritation
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure

Full text of H statements : see section 16

GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)



Signal word (GHS US): Warning

Hazard statements (GHS US):

H227 - Combustible liquid
H302+H332 - Harmful if swallowed or if inhaled
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS US):

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.
P302+P352 - If on skin: Wash with plenty of water.
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 - Call a poison center or doctor if you feel unwell.
P314 - Get medical advice/attention if you feel unwell.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P330 - Rinse mouth.
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse

P370+P378 - In case of fire: Use media other than water to extinguish.
P403+P235 - Store in a well-ventilated place. Keep cool.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Other hazards which do not result in classification
No additional information available
Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients
Substances
Not applicable
Mixtures

Name	Product identifier	%	GHS US classification
2-butoxyethanol	(CAS-No.) 111-76-2	75 - 85	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 4 (Inhalation), H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373
dipropylene glycol monomethyl ether	CAS-No.) 34590-94-8	10 - 15	Flam. Liq. 4, H227
Dipropylene glycol methyl ether acetate	(CAS-No.) 88917-22-0	10 - 15	Flam. Liq. 4, H227

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures
Description of first aid measures
First-aid measures general: Call a poison center/doctor/physician if you feel unwell.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell.
First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion: Rinse mouth. Call a poison center/doctor/physician if you feel unwell.

Most important symptoms and effects (acute and delayed)
Symptoms/effects after inhalation: Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.
Symptoms/effects after skin contact: Irritation.
Symptoms/effects after eye contact: Eye irritation.
Symptoms/effects after ingestion: None under normal conditions

Immediate medical attention and special treatment, if necessary
Treat symptomatically.

SECTION 5: Fire-fighting measures
Suitable (and unsuitable) extinguishing media
Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media : Do not use a heavy water stream.
Specific hazards arising from the chemical
Fire hazard : Combustible liquid.
Explosion hazard : No direct explosion hazard.
Hazardous decomposition products in case of fire: Toxic fumes may be released.

Special protective equipment and precautions for fire-fighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures: Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material-damage.

For non-emergency personnel

Protective equipment: Wear recommended personal protective equipment.

Emergency procedures: Ventilate spillage area. No open flames, no sparks, and no smoking. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

Environmental precautions

Avoid release to the environment.

Methods and material for containment and cleaning up

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak, if possible without risk.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information: Dispose of materials or solid residues at an authorized site.

Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Technical measures : Keep in a cool, well-ventilated place away from heat.

Storage conditions : Store in a well-ventilated place. Keep cool.

Packaging materials : Always store product in container of same material as original container

SECTION 8: Exposure controls/personal protection

Control parameters

Name	CAS	OSHA/ACGIH – TWA	OSHA/ACGIH – STEL	OSHA/ACGIH – Ceiling
2-butoxyethanol	111-76-2	240 mg/m³; 50 ppm; 20 ppm	Not applicable	Not applicable
dipropylene glycol monomethyl ether	34590-94-8	600 mg/m³; 100 ppm; 100 ppm	150 ppm	Not applicable
Dipropylene glycol methyl ether acetate	88917-22-0	Not applicable	Not applicable	Not applicable

Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Environmental exposure controls : Avoid release to the environment.

Individual protection measures/Personal protective equipment

Personal protective equipment: Wear recommended personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state :	Liquid
Color :	Colourless
Odor :	Characteristic
Odor threshold :	No data available
pH :	No data available
Melting point :	Not applicable
Freezing point :	No data available
Boiling point :	171 °C | 339.8 °C [Lowest Component]
Flash point :	67 °C | 152.6 °F [Lowest Component]
Relative evaporation rate (butyl acetate=1):	No data available
Flammability :	No data available
Vapor pressure :	No data available
Relative vapor density at 20°C :	No data available
Relative density :	No data available
Solubility :	No data available
Partition coefficient n-octanol/water (Log Pow) :	No data available
Auto-ignition temperature :	207 °C | 405°F [Lowest Component]
Decomposition temperature :	No data available
No data availableViscosity, kinematic :	No data available
Viscosity, dynamic :	No data available
Explosion limits :	No data available
Explosive properties :	No data available
Oxidizing properties :	No data available
Other information	No additional information available

SECTION 10: Stability and reactivity

Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use

Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

Incompatible materials

No additional information available

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity (oral) : Harmful if swallowed.

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled

ATE US (oral)			**1767.5 mg/kg body weight**	
ATE US (dust, mist)			1.875 mg/l/4h	
Name	CAS	LD50 Oral	LD50 Dermal	LD50 Inhalation
2-butoxyethanol	111-76-2	1746 mg/kg body weight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1322 - 2301	> 2000 mg/kg body weight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)	Not applicable
dipropylene glycol monomethyl ether	34590-94-8	> 5000 mg/kg (Equivalent or similar to OECD 401, Rat, Male/female, Experimental value, Oral, 14 day(s))	Not applicable	> 1.67 mg/l air (Equivalent or similar to OECD 403, 7 h, Rat, Male / female, Experimental value, Inhalation (vapours), 14 day(s))
Dipropylene glycol methyl ether acetate	88917-22-0	Not applicable	Not applicable	Not applicable

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye irritation.

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Not classified

STOT-repeated exposure : May cause damage to organs through prolonged or repeated exposure

2-butoxyethanol (111-76-2)	
NOAEL (dermal,rat/rabbit,90 days)	> 150 mg/kg body weight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure

Aspiration hazard : Not classified

Viscosity, kinematic : No data available

Symptoms/effects after inhalation : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard.

Symptoms/effects after skin contact : Irritation.

Symptoms/effects after eye contact : Eye irritation.

Symptoms/effects after ingestion : None under normal conditions.

SECTION 12: Ecological information

Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment

Name	**CAS**	**LD50 Fish**	**EC50 Crustacae**	**ErC50 Fish**
2-butoxyethanol	111-76-2	Not applicable	≈ 1800 mg/l Test organisms (species): Daphnia magna	Not applicable
dipropylene glycol monomethyl ether	34590-94-8	Not applicable	Not applicable	> 969 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, GLP
Dipropylene glycol methyl ether acetate	88917-22-0	Not applicable	Not applicable	Not applicable

Persistence and degradability

dipropylene glycol monomethyl ether (34590-94-8)	
Persistence and degradability	Readily biodegradable in water.
Biochemical oxygen demand (BOD)	0 g O_2/g substance
ThOD	2.06 g O_2/g substance
BOD (% of ThOD)	0
Dipropylene glycol methyl ether acetate (88917-22-0)	
Persistence and degradability	Biodegradability in water: no data available.

Bioaccumulative potential

dipropylene glycol monomethyl ether (34590-94-8)	
Partition coefficient n-octanol/water (Log Pow)	0.004 (Experimental value, OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method, 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
Dipropylene glycol methyl ether acetate (88917-22-0)	
Partition coefficient n-octanol/water (Log Pow)	0.66 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Mobility in soil

dipropylene glycol monomethyl ether (34590-94-8)	
Surface tension	68.7 mN/m (20 °C, 1 g/l, OECD 115: Surface Tension of Aqueous Solutions)
Ecology - soil	No (test)data on mobility of the substance available.

Other adverse effects

No additional information available

SECTION 13: Disposal considerations

Disposal methods

Regional waste regulation : Disposal must be done according to official regulations.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

Sewage disposal recommendations : Disposal must be done according to official regulations.

Product/Packaging disposal recommendations : Disposal must be done according to official regulations.

Additional information : Do not re-use empty containers

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description (DOT) : NA1993 Compounds, cleaning liquid, 3, III

UN-No. (DOT) : NA1993

Proper Shipping Name (DOT) : Compounds, cleaning liquid

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

Packing group (DOT) : III - Minor Danger

Hazard labels (DOT) : 3 - Flammable liquid



DOT Packaging Non Bulk (49 CFR 173.xxx) : 203

DOT Packaging Bulk (49 CFR 173.xxx) : 242

DOT Special Provisions (49 CFR 172.102) : B1 - If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable. B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or

	equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672). T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.
DOT Packaging Exceptions (49 CFR 173.xxx) :	150
DOT Quantity Limitations Passenger aircraft/rail: (49 CFR 173.27)	60 L
DOT Quantity Limitations Cargo aircraft only (49: CFR 175.75)	220 L
DOT Vessel Stowage Location :	A - The material may be stowed ''on deck'' or ''under deck'' on a cargo vessel and on a passenger vessel.
Other information :	No supplementary information available.
Transportation of Dangerous Goods	Not regulated
Transport by sea	Not regulated
Air transport	Not regulated

SECTION 15: Regulatory information

US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

2-butoxyethanol	**CAS-No. 111-76-2**	**75 - 85%**
dipropylene glycol monomethyl ether	CAS-No. 34590-94-8	10 - 15%
Dipropylene glycol methyl ether acetate	CAS-No. 88917-22-0	10 - 15%

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

International regulations

CANADA

2-butoxyethanol (111-76-2)
Listed on the Canadian DSL (Domestic Substances List)
dipropylene glycol monomethyl ether (34590-94-8)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Dipropylene glycol methyl ether acetate (88917-22-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
2-butoxyethanol(111-76-2)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List
dipropylene glycol monomethyl ether(34590-94-8)	U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of hazard classes and H-statements:

H227	**Combustible liquid**
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H332	Harmful if inhaled
H373	May cause damage to organs through prolonged or repeated exposure

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.