

1. Identification of the Product and Manufacturer and/or Supplier:

Trade Name or Product No.:	Biosperse 142
Chemical Name:	Biomass/Biofilm Dispersant
Chemical Formula:	Mixture
CAS No.:	Not applicable; mixture
Synonym(s):	Glutaraldehyde/Quat
Chemical Family:	Aldehyde
Harmonized Tariff Code:	2912195000 – Aldehydes, whether or not with other oxygen function; cyclic polymers of aldehydes
Type of Product and Use:	Biomass/biofilm dispersant and remover for use in oilfield and industrial water systems, hydraulic fracturing, production systems, waterfloods, gas gathering, and transportation lines. Used to prevent microbiologically induced corrosion and biofouling
Manufacturer and/or Supplier:	Chemlogics, Inc. 992 East Texas Ave. Rayne, Louisiana 70578 Offc.: (337) 334-8100 Fax: (337) 334-1625
Emergency Phone (24 Hrs.):	ChemTel: (800) 255-3924 (Outside US/Canada: +1 (813) 248-0585)

2. Hazard(s) Identification:**GHS Classification of Substance:**

Acute Toxicity – Oral (Category 4), H302

Acute Toxicity - Inhalation [Dusts/Mists] (Category 4), H332

Skin Corrosion (Category 1B), H314

Skin Sensitization (Category 1), H317

Serious Eye Damage/Eye Irritation (Category 1), H318

Specific Target Organ Toxicity - Repeated Exposure (Category 2), Respiratory System, H334

GHS Label Elements:

Pictogram(s):



Signal Word:

Danger**Hazard Statement(s):**

H302

Harmful if swallowed.

H332

Harmful if inhaled.

H317

May cause an allergic skin reaction.

H314

Causes Severe Skin Burns and Eye Damage.

H318

Causes Serious Eye Damage.

H334

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary Statement(s):

P234

Keep in Original Container.

P261

Avoid Breathing Dust/Fume/Gas/Mist/Vapor/Spray.

P271

Use Only Outdoors or In a Well-Ventilated Area.

P280

Wear Protective Gloves and Clothing/Eye Protection/Face Protection.

P301 + P330 + P331 + P310

If Swallowed Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 + P363

If on Skin or Hair: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.

P304 + P340 + P310

If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

P305 + P351 + P338 + P310

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.



Safety Data Sheet

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Biosperse 142 Version: 1.0 Revision Date: February 7, 2017

P390	Absorb Spillage to Prevent Material Damage.
P403 + P233	Store in a Well-Ventilated Place. Keep Container Tightly Closed.
P406	Store in Corrosion Resistant Stainless Steel or Poly Container.
P501	Dispose of Contents/Container to An Approved Waste Disposal Plant.

Hazards Not Otherwise Classified (HNOC) or Not Covered by GHS:

None

3. Composition/Information on Ingredients:

Substance or Mixture:	Substance	Percentage (%):	CAS Number:
Ingredient(s):			
Coco-alkyl quaternary		2 – 5%	Trade Secret
Glutaraldehyde		14 – 18%	111-30-8

There are no additional ingredients present which, within current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First Aid Measures:

Description of Necessary First Aid Measures:

Eye Contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.
Inhalation:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin Contact:	Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.
Ingestion:	Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most Important Symptoms/Effects, Acute and Delayed

Eye Contact:	Causes serious eye damage.
Inhalation:	Harmful if inhaled. May give off gas or vapor that is very irritating or corrosive to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Skin Contact:	Causes skin irritation and burning. Defatting to the skin. May cause an allergic skin reaction.
Ingestion:	Harmful if swallowed. Causes damage to organs following a single exposure if swallowed. May cause burns to mouth, throat and stomach.

Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary

Notes to Physician:	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Specific Treatments:	No data available. The most important known symptoms and effects are described in the labelling (see Section 2) and/or in Section 11

5. Firefighting Measures:

Suitable Extinguishing Media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Hazards Arising From the Substance or Mixture:

Carbon oxides and formaldehyde.

Advice for Firefighters:

Wear self-contained breathing apparatus for firefighting if necessary.

Further Information:

No additional data.



Safety Data Sheet

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Biosperse 142 Version: 1.0 Revision Date: February 7, 2017

6. Accidental Release Measures:

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see Section 8.

Environmental Precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Reference to other sections:

For disposal see Section 13.

7. Handling and Storage:

Precautions for Safe Handling:

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see Section 2.

Conditions for Safe Storage, Including Any Incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Over time, pressure may increase in containers. Handle and open container with care.

Specific End Use(s):

Apart from the uses mentioned in Section 1 no other specific uses are stipulated.

8. Exposure Controls/Personal Protection:

Engineering Controls:

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Personal Protective Equipment:

HMS Personal Protection: H, Vapor Respirator, Safety Goggles, Gloves, and Apron.

Eye protection: Tightly sealed goggles according to OSHA Standard - 29 CFR 1910.133 or ANSI Z87.1-2010

Body protection: Wear rubberized, water-proof, or acid-resistant apron. Protective gloves (chemically resistant) according to OSHA Standard - 29 CFR 1910.138.

Respiratory protection: If exposure levels are exceeded a respirator must be used. If needed use a MSHA/NIOSH approved respirator. Seek professional advice prior to respirator selection and use. Follow all requirements of OSHA respirator regulations (29 CFR 1910.134)

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

General Hygiene: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, using the toilet, or applying cosmetics.

PPE recommendation is advisory only and based on typical use conditions. An industrial hygienist or safety officer familiar with the specific situation of anticipated use must determine actual PPE required when using this product (29 CFR 1910.132).

Exposure Limits:

OSHA (TWA, STEL, PEL): Glutaraldehyde, 111-30-8: (vacated) Ceiling: 0.2 ppm, (vacated) Ceiling: 0.8 mg/m³

ACGIH (TWA/TLV): Glutaraldehyde, 111-30-8: Ceiling: 0.05 ppm (activated and inactivated)

NIOSH (ILDH): Glutaraldehyde, 111-30-8: Ceiling: 0.2 ppm, Ceiling: 0.8 mg/m³

9. Physical Properties:

Physical State: Liquid

Color: Clear, water white to light straw

Odor: Antiseptic-like, pungent

Odor Threshold: No Data Available

pH: 4.0 – 6.0 (5% in Water)

Melting/Freezing Point: <-10°C

Safety Data Sheet

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Biosperse 142 Version: 1.0 Revision Date: February 7, 2017

Boiling Point:	>100°C
Flash Point:	>100°C (Closed Cup – PMCC)
Evaporation Rate	<1 (n-Butyl Acetate = 1)
Flammability, UEL	No Data Available
Flammability, LEL	No Data Available
Vapor Pressure	No Data Available
Vapor Density	No Data Available (Air = 1)
Specific Gravity/Density:	1.067 (+/- 0.03), 8.9 lbs./gal.
Solubility:	Water Soluble
Partition Coefficient (n-octanol/water):	No Data Available
Auto Ignition Temperature:	No Data Available
Decomposition Temperature:	>300°C
Volatile Organic(s)	No VOC content

10. Stability and Reactivity:

Reactivity:	The product is stable under normal storage and use conditions.
Chemical Stability:	The product is stable under normal storage and use conditions.
Possibility of Hazardous Reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to Avoid:	Avoid excessively high temperatures and contact with alkalis or strong oxidizing agents.
Materials to Avoid:	Contact with oxidizing agents. Contact with alkalis.
Hazardous Decomposition:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Decomposition yields carbon monoxide and dioxide, formaldehyde.
Hazardous Polymerization:	Polymerization will not occur.

11. Toxicological Information:

Exposure Routes and Acute Toxicity:

Oral (LD50):	Toxic if swallowed. LD50 Species: Rat (male/female) Value: 143 - 158 mg/kg (OECD Guideline 401).
Inhalation (LC50):	Rat (male/female) Value: 0.48 mg/l (OECD Guideline 403); Exposure time: 4 hr. An aerosol was tested.
Dermal (LC50)	Rat (male/female) Value: > 2,000 mg/kg. The data refer to a diluted watery solution of the substance.
Skin Irritation:	No Applicable Toxicity Data Available. Substance is known to cause burns and damage; corrosive.
Eye Irritation:	May cause severe eye irritation. Ingredients are known to cause burns and damage; corrosive.
Sensitization	ACGIH listed as a sensitizer. Open epicutaneous test (OET) Species: guinea pig, Result: sensitizing. The data refers to a diluted watery solution of the substance.
Reproductive Toxicity:	No Applicable Toxicity Data Available.
Mutagenicity	No Applicable Toxicity Data Available.
Teratogenicity:	No Applicable Toxicity Data Available.
Carcinogenicity:	See following table. Not classifiable as to its carcinogenicity to humans.

Ingredient(s)	IARC	NTP	OSHA
Glutaraldehyde	Lack of evidence of carcinogenicity.	Lack of evidence of carcinogenicity.	Lack of evidence of carcinogenicity. In long-term animal studies in which the substance was given in the drinking water in high concentrations, a carcinogenic effect was not observed.



Safety Data Sheet

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Biosperse 142 Version: 1.0 Revision Date: February 7, 2017

Ingredient(s)	IARC	NTP	OSHA
Coco-alkyl quaternary (Trade Secret)	Lack of evidence of carcinogenicity.	Lack of evidence of carcinogenicity.	Lack of evidence of carcinogenicity.

Delayed (Sub-Chronic and Chronic) Effects:

Embryotoxicity: No Data Available.
 28 Day Inhalation Study: No Data Available.
 90 Day Inhalation Study: No Data Available.

Toxicity Data:

Target Organ(s) (Single Exposure): Skin and eye burns.
 Target Organ(s) (Repeated Exposure): Liver.
 Repeated Dose or Dose Levels Toxicity: No Data Available.
 Ingestion: Toxic if swallowed. LD50 Species: Rat (male/female) Value: 143 - 158 mg/kg (OECD Guideline 401).
 Carcinogenicity: Lack of evidence of carcinogenicity to humans.
 Aspiration Hazard: No Data Available.

General Notes: To the best of our knowledge, the chemical, physical, and Toxicological properties have not been thoroughly investigated.

12. Ecological Information:

Aquatic Toxicity: Fish: Acute: *Lepomis macrochirus*/LC50 (96 h): 9.4 mg/l. Fish test acute static. *Cyprinodon variegatus*/LC50 (96 h): 39 mg/l. Aquatic invertebrates: Acute: *Daphnia magna*/EC50 (48 h): 5.75 mg/l. Mussel/EC50 (96 h): 0.75 mg/l. OPP 72-3 (EPA-Guideline) Flow through. Mysid shrimp/LC50 (96 h): 5.5 mg/l. Acute Toxicity, Freshwater (OECD 203) 96 Hr. LC50 – Rainbow Trout 2.9 mg/l.

Persistence and Degradability: Because of the n-octanol/water distribution coefficient (log P_{ow}) accumulation in organisms is not to be expected. The product is readily biodegradable under aerobic and anaerobic conditions in a water-sediment system (28 days aerobic & 30 days anaerobic).

Bioaccumulative Potential: No Data Available.

Mobility in Soil: Transport between environmental compartments: other adsorption/water – soil log KOC: 0.76

Other Adverse Effects: Toxic to aquatic organisms, may cause adverse effects in the aquatic environment until thoroughly diluted and degraded.

General Notes: All practices must be aimed at eliminating environmental contamination. Do not allow undiluted product or large quantities to enter ground water or sewage systems. Release of large amounts of this product into aquatic environments may lead to a decrease in pH which can be harmful to aquatic organisms.

13. Disposal Considerations:

Dispose of in accordance with local, state and federal regulations.

This material should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult all applicable regulations regarding the proper disposal of this material.

Container contents should be completely used, and containers should be emptied prior to discard. Contaminated packaging should be disposed of as unused product. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the supplier or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

14. Transport Information:

DOT Hazard Class	Corrosive Liquids, Toxic, N.O.S.
DOT Proper Shipping Name	Corrosive Liquids, Toxic, N.O.S. (Contains Glutaraldehyde), Class 8, 6.1, UN 2922, PG-II
IMDG Proper Shipping Name	UN 2922, Class 8, 6.1, PG-II, Corrosive Liquids, Toxic, N.O.S.
IATA Proper Shipping Name	UN 2922, Class 8, 6.1, PG-II, Corrosive Liquids, Toxic, N.O.S.

Identification Labels



Corrosive, Toxic



UN2922

15. Regulatory Information:

SARA Section 302 Components:	No chemicals in this material are subject to the reporting requirements of SARA Section 302. No RQ has been established as of time of this publication, but the product is considered toxic until degraded.
SARA Section 313 Components:	No chemicals in this material are subject to the reporting requirements of SARA Section 313.
SARA 311/312 Acute:	Yes
SARA 311/312 Chronic:	Yes.
SARA 311/312 Hazards:	No Data Available.
SARA 313 List:	This product does not contain any chemicals subject to routine annual toxic chemical release reporting.
CERCLA RQ:	This product does not contain any CERCLA listed hazardous substances. No RQ has been established as of time of this publication (see explanation under SARA Section 302/304 Components above).
TSCA Status:	All components are registered on TSCA inventory.
CAA:	No Data Available.
CWA:	Toxic to aquatic organisms, may cause adverse effects in the aquatic environment until thoroughly diluted and degraded.
CA Prop. 65 Components:	Glutaraldehyde, 111-30-8: Toxic
MA Right to Know Components:	No Data Available.
NJ Right to Know Components:	No Data Available.
PA Right to Know Components:	No Data Available.
Canada WHIMS:	D1B: Materials Causing Immediate and Serious Toxic Effects - Toxic material. E: Corrosive material. D2A: Materials Causing Other Toxic Effects - Very toxic material. D2B: Materials Causing Other Toxic Effects – Toxic material.

16. Other Information:

HMIS III:	Health = 3, Fire = 0, Physical Hazard = 0
HMIS PPE:	H – Splash Goggles, Chemical Resistant Gloves, Rubberized Apron, Vapor Respirator,
NFPA Rating:	Health = 3, Fire = 0, Reactivity = 0, COR = Corrosive



Splash Goggles



Gloves



Protective Apron



Vapor Respirator

HEALTH	3
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	H

The information contained in this document (Safety Data Sheet) was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness, or accuracy. Since the conditions, handling, storage, and disposal of this product are beyond the control of the manufacturer/supplier, they are not held responsible for loss, injury, and expense arising out of the product's use. No warranty, expressed, implied, or inferred, regarding the product described in this document (Safety Data Sheet) shall be created or inferred by any statement in this document (Safety Data Sheet).

Acronyms/Abbreviations:

ANSI: American National Standards Institute
ASTM: American Society of Testing and Materials
BOD⁵ or BOD²⁸: Biological Oxygen Demand, 5-Day or 28-Day Test Standard
CAA: Clean Air Act
CAS: Chemical Abstract Service
CERCLA: Comprehensive Environmental Response, Compensation & Liability Act
CFR: Code of Federal Regulations
CPSC: Consumer Product Safety Commission
CWA: Clean Water Act
DOT: Department of Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
EPA: Environmental Protection Agency
FIFRA: Federal Insecticide, Fungicide and Rodenticide Act
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
HMIS: Hazardous Materials Identification System
IARC: International Agency for the Research on Cancer
IATA: International Air Transportation Association
IMDG: International Maritime Dangerous Goods Code
IMO: International Maritime Organization
IOMC: Inter-Organization Program on the Sound Management of Chemicals
ISO: International Standards Organization
IUPAC: International Union of Pure and Applied Chemistry
LC50: The concentration of a substance in air which resulted in the death of 50% of test subjects.
LD50: The concentration of a substance which resulted in the death of 50% of test subjects.
LEL: Lower Explosive Limits
mg/kg: Milligrams per Kilogram
mg/l: Milligrams per Liter
mg/m³: Milligrams per Cubic Meter
mm/Hg: Millimeters of Mercury; Measurement of Air Pressure
MSDS: Material Safety Data Sheet
NAFTA: North American Free Trade Agreement
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
OECD: The Organization for Economic Cooperation and Development
PEL: Permissible Exposure Limit
pH: Negative Logarithm of the Hydrogen Ion; Measurement of Acidity or Alkalinity
PMCC: Pensky-Martens Closed Cup Flash Point Test
ppm: Parts per Million
RQ: Release Quantity
SARA: Superfund Amendments and Reauthorization Act
SDS: Safety Data Sheet
STEL: Short-Term Exposure Limit
TFHCL: Task Force on the Harmonization of Classification and Labelling
TLV: Threshold Limit Value
TPQ: Threshold Planning Quantities
TSCA: Toxic Substances Control Act
TWA: Time-Weighted Average or Absolute Value
UEL: Upper Explosive Limits
UN: United Nations
UNCED: United Nations Conference on Environment and Development
UNCETDG: United Nations Committee of Experts on the Transport of Dangerous Goods
VOC: Volatile Organic Compounds
WHMIS: Workplace Hazardous Materials Information System