SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier:

Trade Name	:	***LiquiBlock™ DGS***
Chemical Name	:	Acrylic Copolymer
CAS Number	:	Proprietary

1.2 Recommended use of the chemical and restrictions on use

Recommended Use	:	Industrial Use
Non-recommended Use	:	None known

1.3 Details of the supplier of the safety data sheet

Company	:	**Emerging Technologies, inc.** 402 Edwardia Drive Greensboro, NC 27409 USA
Telephone	:	(336)-851-9097
FAX:	:	(336)-851-2153
Email	:	info@thesuperabsorbentsource.com

1.4 Emergency telephone number

EMERGENCY TELEPHONE: 24 hours a day, 7 days a week			NON-EMERGENCY TELEPHONE:
CHEMTREC	1-800-424-9300	COMPANY CODE: EMTE	(336)-851-9097

2. Hazard Identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

2.2 GHS Label elements

Not a hazardous substance or mixture.

2.3 Other Hazards

None known

3. Composition/Information on Ingredients

3.1 Substances

Classification according to regulation 29CFR 1910.1200

Substance name	:	Acrylic Copolymer
CAS number	:	Proprietary
Synonyms	:	NA

3.2 Mixtures

CAS #	Common Name	*Wt. % of Solids*
Proprietary	Acrylic Copolymer	10 – 70 %
Proprietary	Resin	0 – 10%
7732-18-5	Water	0 – 60 %

4. First Aid Measures

4.1 Description of first aid measures

Eyes	:	Flush eyes with running water for at least 15 minutes while occasionally lifting lower and upper eyelids. Seek medical attention if irritation persists or symptoms develop.
Skin	:	Wash affected area thoroughly with soap and water. Remove and launder contaminated clothing. Obtain medical attention if irritation or other symptoms develop or if exposure is extensive.
Ingestion	:	Do not induce vomiting. Drink copious amounts of water and provide fresh air. Never give anything by mouth to an unconscious person. Seek medical attention if necessary.
Inhalation	:	If inhaled, move to source of fresh air. Seek medical attention if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : No known symptoms to date.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

5.1 Extinguishing Media

Suitable media	:	Foam, carbon dioxide, dry powder, water spray. Extremely slippery conditions are created if spilled product comes in contact with water.
Unsuitable media	:	Full water jet

5.2 Hazardous Combustion Products

In the event of fire, the following can be released: Hydrogen chloride gas (HCl), Carbon monoxide (CO), Carbon dioxide (CO2), and Phosgene ($COCl_2$)

5.3 Fire Fighting Instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus.

Do not inhale explosion and /or combustion gases.

6. Accidental Release Measures

Releases of this product to the land, water and air may require reporting to federal, state or local authorities.

6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate personal protective equipment

6.2 Environmental precautions

In the event of a spill, do not flush into drains or waterways. Slip hazard; secure area and restrict access. In accordance with state and federal guidelines, flush diluted residuals to the drain for normal biological treatment. Disposal of undiluted material must be handled according to local, state and federal regulations.

6.3 Methods and material for containment and cleaning up

Containment Procedures

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust)

Clean up procedures

Use caution after product contacts water as extremely slippery conditions will result. Remove as much product as possible by absorbing with liquid binding material such as sand, diatomite, acid binders, universal binders or sawdust. Residuals maybe flushed with water into the drain for normal wastewater treatment.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	:	No special measures required.
Hygiene	:	Wash hands before breaks and after work. Do not eat, drink or smoke when working. Remove soiled or soaked clothing immediately.
General protective measures	:	Avoid contact with eyes and skin.

7.2 Conditions for safe storage, including any incompatibles

Storage

Store in a dry, closed container.

Storage conditions

Storage temperatures 32°-122°F (0°-50°C)

Materials to avoid

Strong oxidizing and reducing agents, strong acids, strong alkalis, acid anhydrides, and acid chlorides.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen chloride gas, Phosgene gas

8. Exposure controls/personal protection

8.1 Control parameters

This product is not regulated as a hazardous material and it contains no substances with occupational exposure limit values (US).

8.2 Engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

8.3 Personal protective equipment

Obey reasonable safety precautions and practice good housekeeping. Wash thoroughly after handling.

Eye protection	:	Wear chemical splash goggles when there is the potential for exposure of the eyes to liquid, vapor or mist. Maintain eye wash station near work area.
Hand protection	:	Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands.
Body protection	:	Wear normal work clothing including long pants, long-sleeved shirts and foot covering to prevent direct contact of the product with the skin. Launder clothing before re-use.
Respiratory protection	:	N/A

9. Physical and chemical properties

9.1 Information on the basic physical and chemical properties

Physical State:	:	Liquid
Appearance	:	Clear / cloudy to pale yellow
Odor	:	Characteristic
Odor Threshold	:	No data available
pH	:	~5 - 6
Melting Point	:	No data available
Boiling Point	:	>212°F (100°C)
Flash Point	:	No data available
Evaporation Rate	:	No data available
Flammability	:	No data available
Upper Explosion/ Ignition Limit	:	No data available
Lower Explosion Limit	:	No data available
Vapor Pressure	:	No data available
Relative Vapor Density	:	No data available
Relative Density	:	No data available
Specific Gravity (Bulk Density)	:	No data available
Solubility	:	No data available
Water Solubility	:	Fully Soluble
Partition Coefficient (n-octanol/water)	:	No data available
Autoignition Temperature	:	No data available
Thermal Decomposition	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	<1,000 mPas @ 68°F (20°C)

10. Stability and reactivity

NFPA Ratings : Health = **1** Fire = **1** Reactivity = **0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic Hazard

10.1 Reactivity

Stable under normal temperatures and pressures.

10.2 Chemical stability

The product is stable under normal conditions.

10.3 Possibility of hazardous reaction

Stable under normal temperatures and pressures.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

Sodium hypochlorite, strong oxidizing and reducing agents, strong acids, strong alkalis, acid anhydrides, and acid chlorides.

10.6 Hazardous decomposition products

Carbon monoxide, carbon dioxide, hydrogen chloride and phosgene.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity (oral)	:	LD_{50} rat Dose: > 5,000 mg/kg Method: Limit test
Acute toxicity (inhalation)	:	No data available
Acute toxicity (dermal)	:	LD_{50} rabbit Dose: > 2,000 mg/kg Method: Limit test
Irritation/corrosion of the skin	:	Species: rabbit Result: non-irritant Method: OECD 404
Serious eye damage/ eye irritation	:	Species: rabbit Result: No irritating effect Method: OECD 405
Respiratory/skin sensitization	:	Species: Guinea Pig Result: No sensitizing effects known. Method: OECD 406
Repeated dose toxicity	:	No data available
Repeated exposure Target Organ Systemic Toxicant	:	Overexposure to this material (or its components) has been suggested as a cause of the following effects in laboratory animals; Kidney damage, Liver damage Overexposure to this material (or its components) has been suggested as a cause of the following effects in humans: Liver damage.

Reprotoxicity/Fertility	:	No data available
Reprotoxicity/Development/Teratogenicity	:	No data available
Specific Target Organ Toxicity-Single exposure	:	No data available
Specific Target Organ Toxicity-Repeated exposure	:	No data available
Aspiration hazard	:	No data available
Other information	:	Proper use provided, no adverse health effects have been observed or have come to our knowledge

IARC (International Agency for Research on Cancer)	:	None of the ingredients are listed.
NTP (National Toxicology Program)	:	None of the ingredients are listed.
US. ACGIH Threshold Limit Values	:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

12. Ecological information

12.1 Toxicity

Aquatoxicity, fish	:	Species: Brachydanio Rerio Exposure duration: 96 h LC50: > 200 mg/L Method: OECD 203
Aquatoxicity invertebrates	:	Species: Daphnia Magna Exposure duration: 48 h EC50: > 250 mg/L
Aquatoxicity, algae/aquatic plants	:	No data available
Toxicity in microorganisms	:	No data available
Chronic toxicity in fish	:	No data available
Chronic toxicity in aquatic invertebrates	:	No data available
Toxicity in organisms which live in soil	:	No data available
Ciliate toxicity:	:	No data available
Biodegradability:	:	No data available
Physico-chemical removability:	:	This product shows good bioeliminability and can be collected into sewage and treated with high efficiency in a biological water treatment plant.
Elimination (persistence and biodegradability):	:	> 70% OECD 302B

Chemical Oxygen Demand (COD):	:	Std. Method 5220 D 130 mg/g
Toxicity to Fish:	:	Brachydanio Rerio LC50/96 h: > 200 mg/l
Toxicity to Daphnia	:	EC50/48 h: > 250 mg/l
General Note(s):	:	Water Hazard Class I, slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course, or sewage system.

12.2 Bioaccumulative potential

Bioaccumulation : No data available

12.3 Mobility in soil

Environmental distribution : No data available

12.4 Results of Persistent, Bioaccumulative and Toxic (PBT) and Very Persistent and Very Bioaccumulative (vPvB) assessment

PBT and vPvB assessment : No data available

12.5 Other adverse effects

General Information : The product is considered to be a weak water pollutant.

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13. Disposal considerations

13.1 Waste treatment methods

Product	:	This product shows good bioeliminability and can be collected into sewage and treated with high efficiency in a biological water treatment plant. Dispose of in accordance with Local, State, and Federal regulations. Must not be disposed of together with household garbage.
Contaminated packaging	:	If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.
General	:	Dispose of the product in accordance with local, state and federal regulations

14. Transport information

Not dangerous according to transport regulations

14.1	**UN number**	:	None
14.2	**UN proper shipping name**	:	None
14.3	**Transport hazard class(es)**	:	None
14.4	**Packing group**	:	None
14.5	**Environmental hazards**	:	None
14.6	**DOT**	:	Not dangerous goods
14.7	**ADR**	:	Not dangerous goods for transport by road
14.8	**ADN**	:	N/A
14.9	**IMDG**	:	No dangerous goods for transport by sea
14.10	**IATA**	:	Not dangerous goods for transport by air
14.11	**Special precautions for user**	:	None

15. Regulatory information

US. California Safe Drinking Water & Toxic Enforcement Act (Proposition 65)	:	This product does not contain any chemicals known to the State of California to cause cancer, birth defects or any other harm.
SARA Title III Section 311/312 Hazard categories	:	No SARA Hazards
TSCA (USA)	:	Listed/registered or exempted
State Right to Know	:	SARA 302: No chemicals in this material are subject to the reporting requirement SARA 304: No chemicals in this material are subject to the reporting requirement SARA 355: No chemicals in this material are subject to the reporting requirement SARA 313: No chemicals in this material are subject to the reporting requirement
HMIS Ratings	:	Health: 1 Flammability: 1 Reactivity: 0 Personal Protection: 0

16. Other information

List of references

Other information	:	Comply with national laws regulating employee instruction
Revision date	:	08 Feb 2018
Supercedes revision dated	:	15 July 2015
Reason for revision	:	New company logo, revised Legend
Key	:	N/A – Not Applicable NE – Not Established

IMPORTANT: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the time of publishing. The information given is designed only as a guidance for safe handling, use processing, storage, transportation, disposal and release and is not considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Legend

ASTM	American Society for Testing and Materials
CAS	Chemical Abstract Services
CFR	Code of Federal Regulations
EINECS	European Inventory of Existing Commercial Chemical Substances
EC50	Half maximal effective concentration
GHS	Globally Harmonized System
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
ISO	International Organization for Standardization
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
NIOSH	National Institute for Occupational Safety and Health
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PBT	Persistent, Bioaccumulative, toxic
RCRA	Resource Conservation and Recovery Act
REACH	Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals: EU regulation 1907/2006
SARA	Superfund Amendments and Reauthorization Act
SVHC	Substances of Very High Concern
TSCA	Toxic Substances Control Act
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
VPvB	Very persistent, very Bioaccumulative
VOC	Volatile Organic Compounds
WGK	Water Hazard Class