Version: 1.1 / EN Revision Date: 1/4/2018

### SECTION 1: IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

1.1 Product identifiers

Product Name : GlowDots

Product Number : GlowDot254W, GlowDot365W, GlowDot405W, GlowDot340,

GlowDot350, GlowDot432, GlowDot494, GlowDot543,

GlowDot576

Brand : ACS Material LLC

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Fluorescence Imaging

1.3 Details of the supplier of the safety data sheet

Company : ACS MATERIAL LLC

959 E Walnut St., Suite 100

Pasadena, CA 91106

USA

Telephone : +1 (866)-227-0656 Fax : +1 (781)-518-0284

1.4 Emergency telephone number

Emergency Phone #: +1 (866)-227-0656

#### **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Eye irritation (Category 2A), H319 May cause respiratory irritation, H335

2.2 GHS Label elements, including precautionary statements

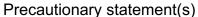
Pictogram

**\** 

Signal word Warning

Hazard statement(s)

H319 Causes serious eye irritation. H335 May cause respiratory irritation.



**P280** Wear protective gloves/ eye protection/ face protection.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a

position comfortable for breathing and call for medical care.

P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1 Substances

Substance name : Bovine Serum Albumin, and one or more dyes including:

1-pyrenebutanoic acid N-hydroxysuccinimidyl, 7-methoxycoumarin-

3-carboxylic acid N-hydroxysuccinimidyl ester, 7-

diethylaminocouramine-3-carboxylic acid N-hydroxysuccinimidyl ester, fluorescein isothiocyanate, tetramethylrhodamine -5-(and-6)-

isothiocynate, and 5-(and-6)-carboxy-x-rhodamine N-

hydroxysuccinimidyl ester.

CAS-No : 9048-46-8 EC-No. : 232-936-2

Synonyms : BSA, serum albumin Linear formula : EDC: C8H17N3

Substance name : 1-ETHYL-3-(3-DIMETHYLAMINOPROPYL)CARBODIIMIDE

CAS-No : 1892-57-5 EC-No. : 217-579-2

Synonyms : EDC

Linear formula : EDC: C8H17N3

### **Hazardous ingredients**

Chemical characterization: Uniform, spherical, pourous

Components	Concentration (wt%)	CAS No.
BSA	>89%	9048-46-8
EDC	trace amounts	1892-57-5
Organic Dyes*	0.5%	114932-60-4
		150321-92-9
		113721-87-2
		3326-32-7
		36877-69-7
		114616-32-9
Glucose	10%	50-99-7

**Hazardous impurities:** None known.

<sup>\*</sup>Dyes and links to their SDS are provided in Section 16.

### **SECTION 4: FIRST AID MEASURES**

### 4.1 Description of first aid measures

### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Rinse cautiously with water for several minutes. Immediate medical attention is not required.

## In case of eye contact

Rinse cautiously with water for several minutes. Remove contact lenses if possible.

#### If swallowed

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

## 4.2 Most important symptoms and effects, both acute and delayed

H315 - Causes skin irritation, H319 - Causes serious eye irritation, H335 - May cause respiratory irritation

4.3 Indication of any immediate medical attention and special treatment needed
No data available

## **SECTION 5: FIREFIGHTING MEASURES**

### 5.1 Extinguishing media

#### Suitable extinguishing media

Use water spray, dry chemical or carbon dioxide foam.

# 5.2 Special hazards arising from the substance or mixture

Keep product and empty container away from heat and sources of ignition

### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

No data available

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment.



# 6.2 Environmental precautions

Do not let product enter drains.

# 6.3 Methods and materials for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: HANDLING AND STORAGE**

## 7.1 Precautions for safe handling

Always wear recommended personal protective equipment. No special handling advices necessary.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep in a dry, cool place.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### 8.1 Control parameters

## Components with workplace control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 8.3 Personal protective equipment

#### **Eye/face protection**

Safety glasses with side-shields

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### **Body Protection**

Impervious, light weight clothing.

### Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.



# Control of environmental exposure

Do not let product enter drains.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

# 9.1 Information on basic physical and chemical properties

1)	Appearance	Form: Solid, White Powder
2)	Odor	No data available
3)	Odor Threshold	No data available
4)	рН	No data available
5)	Melting point/freezing point	No data available
6)	Initial boiling point and boiling range	No data available
7)	Flash point	Not applicable
8)	Evaporation rate	No data available
9)	Flammability (solid, gas)	No data available
10)	Upper/lower flammability or explosive limits	No data available
11)	Vapour pressure	No data available
12)	Vapour density	No data available
13)	Relative density	No data available
14)	Water solubility	No data available
15)	Partition coefficient: n- octanol/water	No data available
16)	Auto-ignition temperature	No data available
17)	Decomposition temperature	No data available
18)	Viscosity	No data available
19)	Explosive properties	No data available
20)	Oxidizing properties	No data available

# 9.2 Other safety information

No data available

## **SECTION 10: STABILITY AND REACTIVITY**

## 10.1 Reactivity

No data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

# 10.3 Possibility of hazardous reactions

No data available





# 10.4 Conditions to avoid

None under normal processing

# 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Other decomposition products - No data available

In the event of fire: see section 5.

### **SECTION 11: TOXICOLOGICAL INFORMATION**

## 11.1 Information on toxicological effects

## **Acute toxicity**

No data available

#### Skin corrosion/irritation

No data available

## Serious eye damage/eye irritation

No data available

## Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

No data available

# Carcinogenicity

No data available

### Reproductive toxicity

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

## **Additional Information**

N/A

### **SECTION 12: ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

See section 11.



## 12.2 Persistence and degradability

Inherent biodegradability

## 12.3 Bioaccumulative potential

Material does not bioaccumulate

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

### **SECTION 13: DISPOSAL CONSIDERATIONS**

### 13.1 Waste treatment methods

#### **Product**

Dispose of contents/containers in accordance with local regulations

### Contaminated packaging

N/A

### **SECTION 14: TRANSPORT INFORMATION**

## DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### IATA

Not dangerous goods

#### SECTION 15: REGULATORY INFORMATION

#### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain HAPs

#### Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer,





birth defects, or any other reproductive harm.

#### **WHMIS Hazard Class:**

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information

#### **SECTION 16: OTHER INFORMATION**

### Full text of H-Statements referred to under sections 2 and 3.

Eye Irrit. Eye irritation

H319 Causes serious eye irritation. H335 May cause respiratory irritation.

STOT SE Specific target organ toxicity - single exposure

**HMIS Rating** 

Health hazard: 2

**Chronic Health Hazard:** 

Flammability: 0 Physical Hazard: 0

**NFPA Rating** 

Health hazard: 2
Fire Hazard: 0
Reactivity Hazard: 0

## Organic Dyes Used:

- 1-pyrenebutanoic acid N-hydroxysuccinimidyl (Pyrene)
  - o CAS No.: 114932-60-4
- 7-methoxycoumarin-3-carboxylic acid N-hydroxysuccinimidyl ester (MethoxyCourmarin)
  - o CAS No.: 150321-92-9
- 7-diethylaminocouramine-3-carboxylic acid N-hydroxysuccinimidyl ester
  - o CAS No.: 150321-92-9 (DEAC)
  - o CAS No.: 113721-87-2
- Fluorescein isothiocyanate Isomer 1 (FITC)
  - o CAS No.: 3326-32-7
- Tetramethylrhodamine -5-(and-6)-isothiocynate (TRITC)
  - o CAS No.: 36877-69-7
- 5-(and-6)-carboxy-x-rhodamine N-hydroxysuccinimidyl ester (ROX)
  - o CAS No.: 114616-32-9

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