Spherotech, Inc.

SAFETY DATA SHEET

Section 1 Identification of the substance/preparation & company/undertaking:

1.1 Product Identifier

Catalog Number: **FH-10040-2, FH-10052-2, FH-10056-2, FH-10062-2, FH-10074-2, FH-10078-2 FH-1056-2, FH-15062-2, FH-2040-2, FH-2045-2, FH-2052-2, FH-2056-2, FH-2060-2, FH-2062-2 FH-2070-2, FH-3056-2 & FH-5056-2**

Product Description:

FH-10040-2	Fluorescent Particles, UV, High Intensity, 1%w/v, 10.0-14.0µm, 2mL
FH-10052-2	Fluorescent Particles, Yellow, High Intensity, 1%w/v, 10.0-14.0µm, 2mL
FH-10056-2	Fluorescent Particles, Nile Red, High Intensity, 1%w/v, 10.0-14.0µm, 2mL
FH-10062-2	Fluorescent Particles, Purple, High Intensity, 1%w/v, 10.0-14.0µm, 2mL
FH-10074-2	Fluorescent Particles, CyGreen, High Intensity, 1E7/mL, 10.0-14.0µm, 2mL
FH-10078-2	Fluorescent Particles, Jade Green, High Intensity, 1E7/mL, 10.0-14.0µm, 2mL
FH-1056-2	Fluorescent Particles, Nile Red, High Intensity, 1%w/v, 1.0-1.4µm., 2mL
FH-15062-2	Fluorescent Purple Particles, High Intensity, 1%w/v, 15.0-19.0µm, 2mL
FH-2040-2	Fluorescent Particles, UV, High Intensity, 1%w/v, 1.7-2.2µm, 2mL
FH-2045-2	Fluorescent Particles, Light Yellow, High Intensity, 1%w/v, 1.7-2.2µm, 2mL
FH-2052-2	Fluorescent Particles, Yellow, High Intensity, 1%w/v, 1.7-2.2µm, 2mL
FH-2056-2	Fluorescent Particles, Nile Red, High Intensity, 1%w/v, 1.7-2.2µm, 2mL
FH-2060-2	Fluorescent Particles, Purple/Yellow, High Intensity, 1%w/v, 1.7-2.2µm, 2mL
FH-2062-2	Fluorescent Particles, Purple, High Intensity, 1%w/v, 1.7-2.2µm, 2mL
FH-2070-2	Fluorescent Particles, Sky Blue, High Intensity, 0.2%w/v, 1.7-2.2µm, 2mL
FH-3056-2	Fluorescent Particles, Nile red, High Intensity, 1%w/v, 2.5-4.5µm, 2mL
FH-5056-2	Fluorescent Particles, Nile Red, High Intensity, 1%w/v, 5.0-7.9µm, 2mL

1.2 Relevant identified uses of the substance & uses advised against

This material is only for purpose of technical analysis and/or scientific research. The health, toxicological, & eco-toxicological hazards of this substance have not been fully investigated; therefore, this substance must be handled only by, or under close supervision of those qualified in the handling and use of potentially hazardous substances. Not for domestic or food/drug/cosmetic use.

1.3 Details of the supplier of the safety data sheet

Spherotech, Inc.
27845 Irma Lee Circle, Unit 101
Lake Forest, IL 60045-5100 U.S.A.
Tel: (847) 680 – 8922

1.4 Emergency telephone number USA: 800-368-0822

Section 2 Hazards Identification:

2.1 Classification of substance or mixture

Not classified as hazardous according to Regulation (EC) 1272/2008 (CLP/GHS) or Directive 67/548/EEC as amended. Caution: This substance has not been fully tested (EC).

Inhalation (power/mists):	May be harmful if inhaled. May cause upper respiratory tract & mucous membrane irritation.
Skin and Eyes:	May cause skin and eye irritation.
Ingestion:	May be harmful if swallowed.
Environmental:	May be harmful to the environment.

2.2 Label Elements

None required according to regulation (EC) 1272/2008 (CLP/GHS) or Directive 1999/45/EC

Section 3 Composition Information on Ingredients:

Refers to content in aqueous solution:

Name	CAS Number	EC Number	Regulation (EC) 1272/2008 Hazard class, categ. Code, & hazard statements	Directive 67/548/EEC Class & R phrases	Percent (w/w) approx.
Water	7732-18-5	231-791-2	Not hazardous	Not hazardous	98.98%
Polystyrene beads organic dye stained	9003-53-6	500-008-9	Not hazardous	Not hazardous	1.0%
Sodium Azide	26628-22-8	247-852-1	Acute Tox. 2 H300 H310 H330; Aquatic Acute 1 H400; Aquatic Chronic 1 H410	T+; R28 R32 N; R50-53	0.02%

Section 4 Emergency First Aid Procedures:

Inhalation:	Immediate fresh air & rest. Keep under observation and if breathing becomes difficult seek immediate medical attention. Resuscitate if breathing stops.
Skin Contact:	Remove contaminated clothes. Rinse skin with plenty of water or shower. Refer for medical attention.
Eye Contact:	First rinse with plenty of water for at least 10 minutes (remove contact lenses if easily possible), ensure lids remain open during flushing, and then seek immediate medical attention.
If Swallowed:	Rinse mouth with water, but do not swallow mouthwash. Do not induce vomiting. Give plenty of water to drink (ONLY IN CONSCIOUS PERSONS). Refer for medical attention.

Section 5 Fire-Fighting Measures:

Main Hazard:	Forms combustible solid if allowed drying out. Emits corrosive & toxic fumes, including oxides of carbon, & nitrogen during combustion.
Extinguishing Method:	Use foam extinguishers or water spray.
Special Fire Fighting Procedure:	Wear self contained breathing apparatus with full face shield operated in positive pressure mode, MSHA/NIOSH (approved or equivalent), and full protective gear.
Unusual Fire Hazards and Explosion Hazards:	May produce black acrid smoke if burned.

Section 6 Accidental Release Measures:

General Information: Use protective equipment as detailed in section 8.

Spill/Leaks: Clean up spills using an absorbent, non-combustible material and gather up placing in a clean closed container for disposal. Do not wash away into sewers.

Section 7 Handling and Storage:

Read the Suppliers' technical data Sheet carefully before commissioning or using the product. Store unopened package at ambient temperature, light protected in a well ventilated place away from heat.

Section 8 Exposure Controls/ Personal Protection:

Components with workplace control parameters

No components above the 0.1% threshold have specific workplace control parameters assigned to our knowledge.

Local mechanical ventilation not required as supplied, but this is also dependent on other mobile phases and analytes used. Always use a fume cupboard if handling as the dry power or where the liquid component may become airborne.

Personal Protective Equipment

Respiratory protection: If required to control exposure, use only suitable respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand Protection: Suitable impervious gloves e.g. Nitrile or Neoprene rubber. The selected protective gloves have to conform to EN 374.

Eye Protection: Safety glasses with side-shields conforming to EN 166

Hygiene measures: Avoid contact of contents with skin, eyes, and clothing. Wash hand before breaks and immediately after handling the product.

Section 9 Physical and Chemical Properties:

Physical State:	Dilute suspension of Polystyrene beads organic dye stained in water with 0.02% Sodium Azide as preservative.
Color:	Cloudy, various depending on fluorophore used
Order:	No information available
Order Threshold:	No information available
pH:	No information available
Vapor Pressure:	No information available
Vapor Density:	No information available
Viscosity:	No information available
Boiling Point:	100˚C / 212˚F
Melting Point:	No information available
Decomposition temperature ^{o}C:	No information available
Flash Point:	Not applicable
Evaporation Rate:	No information available
Specific Gravity:	No information available
Solubility:	No information available
Log Pow:	No data available

Section 10 Stability and Reactivity

Stability:	Stable
Conditions to avoid:	Extreme heat
Materials to avoid:	Strong oxidizing agents, bases
Hazardous Decomposition:	Monomer maybe formed if heated to high temperatures. May release toxic fumes including oxides of carbon and nitrogen.
Hazardous Polymerization:	Will not occur.

Section 11 Toxicological Data
Caution: To the best of our knowledge, the toxicological properties of these materials have not been fully investigated.

Routes of Exposure:

Inhalation:	May be harmful if inhaled.
Skin contact:	May cause skin irritation.
Skin Absorption:	May be harmful if absorbed through skin.
Ingestion:	May be harmful if swallowed.

Section 12 Ecological Information:
To the best of our knowledge, the ecotoxicological properties of this mixture have not been fully investigated. However, the liquid may be harmful to the environment depending on the quantity and dilution involved.

Section 13 Disposal Considerations:
Methods of disposal must meet all local, federal and state laws.

Section 14 Transportation Information:
IATA, IMO/IMDG, ADR/RID, US-DOT: Not classified as hazardous for any mode of transport.

Section 15 Regulatory Information:
US (TSCA) Manufactured for Research and development only. Note: Chemical substances that are manufactured or imported in small quantities solely for the use in Research and Development are not subject to the notification requirements of the Toxic Substance Control Act (TSCA), 15 USC 2604 (h) et seq. Reference – 40CFR720.36

CAS# 026628-22-8 is listed on the TSCA Inventory.

Section 16 Other Information:
16.1 Text of hazard categ. Codes, hazard statements, and R-phase(s) mentioned in Section 3:
Acute Tox 2. Acute toxicity category 2
H300 Fatal if swallowed.
H310 Fatal in contact with skin.
H330 Fatal if inhaled.
Aquatic Acute 1. Hazardous to the aquatic environment, acute, category 1
H400 Very toxic to aquatic life.
Aquatic Chronic 1. Hazardous to the aquatic environment, chronic, category 1
H410 Very toxic to aquatic life with long lasting effects.

T+ Very Toxic
R28 Very toxic if swallowed
R32 Contact with acids liberates very toxic gas
N. Dangerous to the environment
R50-53 Very toxic to aquatic organisms, may cause long-term adverse guide for this product.

16.2 Further Information:

This SDS was prepared in accordance with ANSI Z400.1-1993, 91/155/EEC & EC 1907/2006 recommended formats. The information contained herein is believed to be accurate, but does not purport to be all-inclusive and shall be used only as a guide. Spherotech, Inc., does not guarantee said information is accurate or complete, nor shall any of this information constitute a warranty, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for a particular purpose. It is the user's responsibility to determine the suitability of this information and to assure the adoption of necessary precautions. Spherotech, Inc. shall not be held liable for any damages resulting from handling or from contact with the above product, nor for the results obtained, or for incidental or consequential damage arising from the use of these data. No freedom infringement of any patent, copyright or trademark is to be inferred.

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