

# Material Safety Data Sheet

Date of Issue: 26 Oct 2018

# 1. IDENTIFICATION OF THE SUBSTANCE

. Product Name: FSD Fluor<sup>®</sup> 680 NHS ester

. Product Code: KOSC1515

# 2. COMPANY INFORMATION

BioActs. DK Tower 10th F, 595 beongil-9, Cheongneung-daero Namdong-gu, Incheon, Korea

- . Telephone: 82-32-818-9100
- . Fax: 82-32-818-8206
- . E-mail: <u>technical@bioacts.com</u>

. Emergency Contact: 82-32-818-9100

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

- . Component: FSD Fluor® 680 NHS ester mixture
- . Weight Percent: 80 100

The product contains no substances that considered to be hazardous to health. We recommend handling all chemicals with caution.

# 4. HAZARDS IDENTIFICATION

**Health hazards overview**: We are not aware of any reported health hazards for this product, however we recommend treating all chemicals with caution.

## **Potential Health Effects Principle Routes of exposure**

Inhalation:May be harmful by inhalationSkin:May cause skin irritation in susceptible personsEyes:May cause eye irritationIngestion:May be harmful if swallowed

## **Specific Effects**

Carcinogenic effects:	No concerning information for making a satisfactory assessment
Mutagenic effects:	No concerning information for making a satisfactory assessment
<b>Reproductive toxicity</b> :	No concerning information for making a satisfactory assessment
Sensitization:	No concerning information for making a satisfactory assessment

# 5. FIRST AID MEASURES

Skin contact:	Rinse with plenty of water. If symptoms arise, call a physician.
Eye contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
	If symptoms persist, call a physician.
Ingestion:	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
	Do not induce vomiting without medical advice.
Inhalation:	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Notes to physician: Treat symptomatically.

# 6. FIRE-FIGHTING MEASURES

Suitable extinguishing media:Water spray, ABC powder or carbon dioxide foamSpecial protective equipment for fire-fighters:Wear self-contained breathing apparatus and protective suit.

## 7. ACCIDENTAL RELEASE MEASURES

Personal precautions:Use personal protective equipment.Methods for cleaning up:Take up mechanically and collect in suitable container for disposal.

## 8. HANDLING AND STORAGE

Handling:Always wear recommended protective equipment. No special handling advice required.Storage:Store at -20 °C in a dark.

## 9. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures:Ensure adequate ventilation, especially in confined areas.Permissible exposure limit:Not available

## Personal protective equipment

<b>Respiratory protection</b> :	In case of insufficient ventilation, wear suitable respiratory equipment.
Hand protection:	Impervious gloves
Eye protection:	Safety glasses with side-shields
Hygiene measures:	Handle in accordance with good industrial hygiene and safety practice.

# 10. PHYSICAL AND CHEMICAL PROPERTIES

#### **General Information**

Form:	Liquid
Appearance:	Blue
Odor:	No information available
pH:	No data available
Melting point:	No data available
Boiling point:	No data available
Flash point:	No data available
Ignition temperature:	No data available
<b>Oxidizing properties:</b>	No information available
Water solubility:	No data available

# 11. STABILITY AND REACTIVITY

Stability:	Stable under normal conditions
Hazardous decomposition:	No dangerous reaction under normal usage
Dangerous decomposition:	None under normal use

# 12. TOXICOLOGICAL INFORMATION

# **Acute Toxicity**

Chemical Name	LD <sub>50</sub> oral (rat, mouse)	LD50 dermal (rat, rabbit)	LD50 inhalation (rat, mouse)
FSD Fluor <sup>®</sup> 680 NHS ester	No data available	No data available	No data available

## **Potential Acute Health Effects of Principle Exposure Routes**

Inhalation:	May be harmful by inhalation
Ingestion:	May be harmful if swallowed
Skin:	May cause skin irritation in susceptible persons
Eye contact:	May cause eye irritation with susceptible persons

## **Potential Chronic Health Effects**

Chronic effects:	No known significant effects or critical hazards
Carcinogenicity:	No known significant effects or critical hazards
Mutagenicity:	No concerning information for making a satisfactory assessment
Reproductive toxicity:	No known significant effects or critical hazards
Fertility effects:	No known significant effects or critical hazards

# **13. ECOLOGICAL INFORMATION**

<b>Biodegradation</b> :	Inherently biodegradable
Ecotoxicity effects:	No information available
Mobility:	No information available
<b>Bioaccumulation</b> :	Does not bioaccumulation.

# 14. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulation

## **15. TRANSPORT INFORMATION**

#### International Air Transport Association (IATA)

Proper shipping name:	Not classified as dangerous in the meaning of transport regulations
Hazard class:	None
Subsidiary Class:	None
Packing group:	None
UN-Number:	None

## **16. REGULATORY INFORMATION**

No specific data

## **17. OTHER INFORMATION**

The above information was acquired by diligent search and/or investigation, and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, BioActs shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS MSDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

End of MSDS