# Safety Data Sheet

**Issue Date:** 06-Jun-2022 **Revision Date:** 01-Aug-2022 **Version** 1

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product Identifier

**SDS #** ISSI-002-EU
**Product Name** FIB Basecoat

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

**Recommended Use** Wind tunnel testing

### 1.3. Details of the Supplier of the Safety Data Sheet

**Supplier**
Innovative Scientific Solutions, Inc.
7610 McEwen Road
Dayton, OH 45459

### For further information, please contact

**Contact Point** Innovative Scientific Solutions, Inc. Phone: (937) 630-3012
Fax: (937) 630-3015
**Email Address** painting@innssi.com

### 1.4. Emergency telephone number

Emergency Telephone (24 hr) (937) 630-3012 x100

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the Substance or Mixture

***Regulation (EC) No 1272/2008***

| | |
|---|---|
| **Chronic aquatic toxicity** | Category 2 - (H411) |
| **Flammable liquids** | Category 2 - (H225) |

### 2.2. Label Elements

**Product Identifier**

**Signal Word**
Danger

**Hazard statements**
H225 - Highly flammable liquid and vapour
H411 - Toxic to aquatic life with long lasting effects

**Precautionary Statements - EU (§28, 1272/2008)**
P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P273 - Avoid release to the environment
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish
P391 - Collect spillage
P403 + P235 - Store in a well-ventilated place. Keep cool
P501 - Dispose of contents/ container to an approved waste disposal plant

### 2.3. Other Hazards
No information available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 MIXTURES

| Chemical name | EC No | CAS No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | REACH Registration Number |
|---|---|---|---|---|---|
| α,α,α-Trifluorotoluene | Present | 98-08-8 | 90-95 | Aquatic Chronic 2 (H411)<br>Flam. Liq. 2 (H225) | Not determined |
| Titanium dioxide | Present | 13463-67-7 | 0.1-1 | Carc. 2 (H351i) | Not determined |

**Full text of H- and EUH-phrases: see section 16**
This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## Section 4: FIRST AID MEASURES

### 4.1. Description of First Aid Measures

**Eye Contact** Rinse immediately with plenty of water and seek medical advice.

**Skin Contact** Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

**Inhalation** Remove to fresh air.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

### 4.2. Most Important Symptoms and Effects, Both Acute and Delayed

**Symptoms** None known.

### 4.3. Indication of any Immediate Medical Attention and Special Treatment Needed

**Notes to Physician** Treat symptomatically.

## Section 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing Media

**Suitable Extinguishing Media**
Use CO2, dry chemical, or foam for extinction.

**Unsuitable Extinguishing Media**
Not determined.

### 5.2. Special Hazards Arising from the Substance or Mixture
Highly flammable liquid and vapour.

### 5.3. Advice for Firefighters
Wear self-contained breathing apparatus and protective suit. Use personal protective equipment as required.

## Section 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**Personal Precautions**
Use personal protective equipment as required.

**For Emergency Responders**
Use personal protection recommended in Section 8.

### 6.2. Environmental Precautions
See Section 12 for additional Ecological Information.

### 6.3. Methods and Material for Containment and Cleaning Up

**Methods for Containment** Prevent further leakage or spillage if safe to do so.

**Methods for Clean-Up** Place in appropriate containers for disposal.

### 6.4. Reference to Other Sections
See Section 13: DISPOSAL CONSIDERATIONS.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for Safe Handling

**Advice on Safe Handling**
Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion proof equipment. Use only non-sparking tools. Take precautionary measures against static discharges. Wear protective gloves/protective clothing and eye/face protection.

**General Hygiene Considerations**
Handle in accordance with good industrial hygiene and safety practice.

### 7.2. Conditions for Safe Storage, Including any Incompatibilities

**Storage Conditions**
Store in a well-ventilated place. Keep cool.

### 7.3. Specific End Use(s)

**Specific Use(s)**
Wind tunnel testing.

**Risk Management Methods (RMM)**
The information required is contained in this Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control Parameters

**Exposure Limits**

| Chemical name | European Union | United Kingdom | France | Spain | Germany |
|---|---|---|---|---|---|
| α,α,α-Trifluorotoluene 98-08-8 | - | - | - | - | TWA: 1 mg/m$^3$ |
| Titanium dioxide 13463-67-7 | - | STEL: 30 mg/m$^3$<br>STEL: 12 mg/m$^3$<br>TWA: 10 mg/m$^3$<br>TWA: 4 mg/m$^3$ | TWA: 10 mg/m$^3$ | TWA: 10 mg/m$^3$ | TWA: 1.25 mg/m$^3$<br>TWA: 10 mg/m$^3$ |
| **Chemical name** | **Italy** | **Portugal** | **Netherlands** | **Finland** | **Denmark** |
| α,α,α-Trifluorotoluene 98-08-8 | - | TWA: 2.5 mg/m$^3$ | - | - | TWA: 2.5 mg/m$^3$ |
| Titanium dioxide 13463-67-7 | - | TWA: 10 mg/m$^3$ | - | - | TWA: 6 mg/m$^3$ |
| **Chemical name** | **Austria** | **Switzerland** | **Poland** | **Norway** | **Ireland** |
| α,α,α-Trifluorotoluene 98-08-8 | - | - | TWA: 2 mg/m$^3$ | - | TWA: 2.5 mg/m$^3$<br>STEL: 7.5 mg/m$^3$ |
| Titanium dioxide 13463-67-7 | STEL 10 mg/m$^3$<br>TWA: 5 mg/m$^3$ | TWA: 3 mg/m$^3$ | STEL: 30 mg/m$^3$<br>TWA: 10 mg/m$^3$ | TWA: 5 mg/m$^3$<br>STEL: 10 mg/m$^3$ | TWA: 10 mg/m$^3$<br>TWA: 4 mg/m$^3$<br>STEL: 30 mg/m$^3$<br>STEL: 12 mg/m$^3$ |

### 8.2. Exposure Controls

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits.

**Personal Protective Equipment**

**Eye/Face Protection** Avoid contact with eyes.
**Hand Protection** Gloves are not required for normal use.
**Skin and Body Protection** Suitable protective clothing.
**Respiratory Protection** Ensure adequate ventilation, especially in confined areas.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on Basic Physical and Chemical Properties

**Physical state** Liquid
**Appearance** Clear liquid
**Colour** Colourless
**Odour** Smells like TFT
**Odour Threshold** Not determined

| Property | Values | Remarks • Method |
|---|---|---|
| **pH** | Not determined | |
| **Melting point / freezing point** | Not determined | |
| **Boiling point / boiling range** | Not determined | |
| **Flash point** | Not determined | |
| **Evaporation Rate** | Not determined | |
| **Flammability (Solid, Gas)** | Liquid-Not applicable | |
| **Flammability Limit in Air** | | |
| **Upper flammability or explosive limits** | Not determined | |
| **Lower flammability or explosive limits** | Not determined | |
| **Vapour Pressure** | Not determined | |
| **Vapour Density** | Not determined | |
| **Relative Density** | Not determined | |

| Property | Values | Remarks • Method |
|---|---|---|
| **Water Solubility** | Not determined | |
| **Solubility(ies)** | Not determined | |
| **Partition Coefficient** | Not determined | |
| **Autoignition temperature** | Not determined | |
| **Decomposition temperature** | Not determined | |
| **Kinematic viscosity** | Not determined | |
| **Dynamic Viscosity** | Not determined | |
| **Explosive Properties** | Not determined | |
| **Oxidising Properties** | Not determined | |

## Section 10: STABILITY AND REACTIVITY

**10.1. Reactivity**
Not reactive under normal conditions.

**10.2. Chemical stability**
Stable under normal conditions.

**10.3. Possibility of Hazardous Reactions**

**Possibility of Hazardous Reactions**
None under normal processing.

**10.4. Conditions to Avoid**
Keep out of reach of children.

**10.5. Incompatible Materials**
None known based on information supplied.

**10.6. Hazardous Decomposition Products**
None under normal use conditions.

## Section 11: TOXICOLOGICAL INFORMATION

**11.1. Information on Toxicological Effects**

**Acute toxicity**

**Product Information**

| | |
|---|---|
| **Inhalation** | Do not inhale. |
| **Eye Contact** | Avoid contact with eyes. |
| **Skin Contact** | Avoid contact with skin. |
| **Ingestion** | Do not ingest. |

**The following values are calculated based on chapter 3.1 of the GHS document**

| | |
|---|---|
| **ATEmix (oral)** | 16,111.70 mg/kg |
| **ATEmix (dermal)** | 2,150.40 mg/kg |
| **ATEmix (inhalation-dust/mist)** | 76.06 mg/L |

**Unknown Acute Toxicity**

99.1 % of the mixture consists of ingredient(s) of unknown toxicity.
6 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.
6 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.
99.1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).
99.1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).
6 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Component Information**

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| α,α,α-Trifluorotoluene | = 15 g/kg ( Rat ) | > 2000 mg/kg ( Rat ) | = 70810 mg/m$^3$ ( Rat ) 4 h |
| Titanium dioxide | > 10000 mg/kg ( Rat ) | | |

**Skin corrosion/irritation** Not classified.

**Serious eye damage/eye irritation** Not classified.

**Sensitisation** Not classified.

**Germ cell mutagenicity** Not classified.

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Chemical name | European Union |
|---|---|
| Titanium dioxide | Carc. 2 |

**Reproductive toxicity** Not classified.

**STOT - single exposure** Not classified.

**STOT - repeated exposure** Not classified.

**Aspiration hazard** Not classified.

## Section 12: ECOLOGICAL INFORMATION

**12.1. Toxicity**

Toxic to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Crustacea |
|---|---|---|---|
| α,α,α-Trifluorotoluene | | 212: 96 h Brachydanio rerio mg/L LC50 static | |

**12.2. Persistence and Degradability**

Not determined.

**12.3. Bioaccumulative Potential**

| Chemical name | Partition coefficient |
|---|---|
| α,α,α-Trifluorotoluene | 3.01 |

**12.4. Mobility in Soil**

**Mobility**

Not determined.

**12.5. Results of PBT and vPvB Assessment**

Not determined.

**12.6. Other Adverse Effects**

Not determined.

## Section 13: DISPOSAL CONSIDERATIONS

**13.1. Waste Treatment Methods**

| | |
|---|---|
| **Waste from residues/unused products** | Disposal should be in accordance with applicable regional, national and local laws and regulations. |
| **Contaminated Packaging** | Improper disposal or reuse of this container may be dangerous and illegal. |

## Section 14: TRANSPORT INFORMATION

**IMDG**

| | |
|---|---|
| **14.1 UN number** | UN1263 |
| **14.2 Proper Shipping Name** | Paint |
| **14.3 Transport hazard class(es)** | 3 |
| **14.4 Packing Group** | II |
| **14.5 Marine Pollutant** | This material may meet the definition of a marine pollutant |

**RID**

| | |
|---|---|
| **14.1 UN/ID No** | UN1263 |
| **14.2 Proper Shipping Name** | Paint |
| **14.3 Transport hazard class(es)** | 3 |
| **14.4 Packing Group** | II |

**ADR**

| | |
|---|---|
| **14.1 UN number** | UN1263 |
| **14.2 Proper Shipping Name** | Paint |
| **14.3 Transport hazard class(es)** | 3 |
| **14.4 Packing Group** | II |

**IATA**

| | |
|---|---|
| **14.1 UN number** | UN1263 |
| **14.2 Proper Shipping Name** | Paint |
| **14.3 Transport hazard class(es)** | 3 |
| **14.4 Packing Group** | II |

## Section 15: REGULATORY INFORMATION

**15.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture**

**European Union**

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

**Authorisations and/or restrictions on use:**

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

**Persistent Organic Pollutants**

Not applicable

**Ozone-depleting substances (ODS) regulation (EC) 1005/2009**

Not applicable

**International Inventories**

| Chemical name | TSCA | DSL/NDSL | EINECS/ELINCS | PICCS | ENCS | IECSC | AICS | KECL |
|---|---|---|---|---|---|---|---|---|
| α,α,α-Trifluorotoluene 98-08-8 ( 90-95 ) | X | X | X | X | X | X | - | - |
| Titanium dioxide 13463-67-7 ( 0.1-1 ) | X | X | X | X | X | X | X | X |

**Legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances
**ENCS** - Japan Existing and New Chemical Substances
**IECSC** - China Inventory of Existing Chemical Substances
**AICS** - Australian Inventory of Chemical Substances
**KECL** - Korean Existing and Evaluated Chemical Substances

**15.2. Chemical Safety Assessment**

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## Section 16: OTHER INFORMATION

**Full text of H-Statements referred to under section 3**

H225 - Highly flammable liquid and vapour
H351 - Suspected of causing cancer
H411 - Toxic to aquatic life with long lasting effects

**Legend**

SVHC: Substances of Very High Concern for Authorisation:

**Legend** **Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---|---|---|---|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | * | Skin designation |

**Classification Procedure**

Calculation method

**Issue Date:** 06-Jun-2022

**Revision Date:** 06-Jun-2022

**Revision Note:** New format.

**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2015/830**

**Disclaimer**

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**End of Safety Data Sheet**