

# Material Safety Datasheet

## SECTION 1: Identification of the substance and of the company

### Product identifier

Name: ExcelFil ABS 3D printing Filament (Acrylonitrile Butadiene Styrene Resin)  
SKU: EF-ABS-XXX-XXXXX

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

Use only in 3D FFD Printers

### Details of the supplier of the safety data sheet

Company	Voltivo Group Ltd.
Address	7F, No.5, Alley 27, Lane 216, Sec. 4, Zhongxiao E. Road, 106 Taipei
Information Phone	+886 2 87713 997 (Customer Care)
Emergency Phone	+886 2 87713 997 (Customer Care)

## SECTION 2: Hazards identification

Instability: None.

Incompatibility: Stable.

Decomposition: Slow reaction in the presence of water.

Polymerization: Will not occur, already a polymer.

Combustion: Carbon monoxide and / or carbon dioxide may form during the combustion of this product.

## SECTION 3: Composition/information on ingredients

Chemical Name: Acrylonitrile Butadiene Styrene Resin

CAS Number: 9003-56-9

Common Names: ABS

## SECTION 4: First aid measures

Skin Contact	Solid or dust may cause irritation or corneal injury due to mechanical action
Eyes Contact	Essentially nonirritating to skin, Mechanical injury only
Inhalation	No harmful effects expected. Consult a physician.
Swallowing	No harmful effects expected. Consult a physician.

## SECTION 5: Firefighting measures

Unusual Explosion Hazard and Fire	The material will burn if exposed to sufficient heat and an ignition source. Avoid dispersion of dust in the air to reduce dust explosion hazard potential.
Extinguished Media	Water, Carbon dioxide, Dry chemical powder, Foam.
Special Extinguishing Procedures	Firefighters must wear self-contained breathing apparatus and fully protective equipment.

## SECTION 6: Accidental release measures

Personal precautions: Use personal protective equipment. See Section 8. Remove all sources of ignition. Avoid dust formation. Avoid contact with skin and eyes. Sweep up to prevent slipping hazard.

Environmental precautions: Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system.

Methods for cleaning up: Dispose into suitable container for disposal.

## SECTION 7: Handling and storage

### Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Wash thoroughly after handling. Hot and/or melted polymer can severely burn the skin. Handle with care.

### Conditions for safe storage, including any incompatibilities

Avoid contacting with atmospheric moisture. Store materials at < 60 degrees C with a desiccant in original containers to maintain product quality. Keep the container closed until it is ready for use.

## SECTION 8: Exposure controls/personal protection

General Control Measures and procedures	None for normal use.
Personal Protective Equipment	Rubber gloves, Safety glasses
Ventilation	Necessary to exclude dust, fumes and gases

## SECTION 9: Physical and chemical properties

Physical state	Solid Wire
Odor threshold	No data available
pH	Not applicable
Vapor pressure	Not determined
Vapor density	Not determined
Evaporation rate	No data available
Density	1.05 g/cc
Decomposition temperature	350 °C
Water solubility	Insoluble
Solubility in other solvents	None known

## SECTION 10: Stability and reactivity

Stability	Stable under recommended storage conditions
Conditions to avoid	Temperatures above 350 °C
Materials to avoid	Oxidizing agents, Strong bases
Hazardous decomposition products	Burning produces obnoxious and toxic fumes, Aldehydes, Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
Polymerization	Not applicable

## SECTION 11: Toxicological information

Principle Routes of Exposure	Eye contact, Skin contact, Inhalation, Ingestion
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Acute toxicity	There were no target organ effects noted following ingestion or dermal exposure in animal studies
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## SECTION 12: Ecological information

Bioaccumulation: Does bio accumulate, inherently persisting

## SECTION 13: Disposal considerations

Material is non-hazardous

Spillage of Release	Collect for disposal. Use appropriate personal protective equipment during cleanup.
Waste disposal	Bury in a landfill in compliance with all federal, state and local regulations.

## SECTION 14: Transport information

Not regulated as hazardous

## SECTION 15: Regulatory information

### NFPA 704 Classification

Flammability	1
Health	1
Instability Reactivity	0
Special Notices	none

## SECTION 16: Other information

### Notice regarding medical applications restrictions

The company does not recommend any of its products, including samples, for use: (A) in any application which is intended for any internal contact with human body fluids or body tissues (B) as a critical component in any medical device that supports or sustains human life; and (C) specifically pregnant women or in any applications designed specifically to promote or interfere with human reproduction.

**The Information Herein Is Given In Good Faith, But No Warranty, Express Or Implied, Is Made. Consult the Company for Further Information.**