MATERIAL DATA SAFETY SHEET

Issued in Australia by Bilby 3D Pty Ltd.

The attached Material Data Safety Sheet has been prepared by the manufacturer outside Australia.

In accordance with Australia WHS regulations the following Australian contact details apply

Section 1: AUSTRALIAN COMPANY DETAILS

In Australia the product is imported and distributed by:

Bilby 3D Pty Ltd

Mailing Address: PO Box 62 BEGA NSW 2550

Head Office Address: 452 Wyndham Lane Kanoona NSW 2550

Contact Phone: 1800 847 333

Section 2: AUSTRALIAN EMERGENCY CONTACT

Emergency Contact

In the event of an emergency please contact: Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

Section 3: AUSTRALIAN ISSUE DATA

Date of Issue: 1 March 2020

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SDS Number: RF160 Version: 1.0

Product identifier

Product name : BILBY 3D ABSI (ABS Industrial)

Product code : ABSI

Recommended use of the chemical and restrictions on use

Identified use : Plastics which can be used for 3D printing

GHS Classification

This material is not considered hazardous under the OSHA Hazard Communication Standard (HazCom 2012).

GHS label elements

Hazard Statement: None required Precautionary Statement: None Signal word: None

Pictogram: None

Other hazards

If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. See Section 7 and 8 for additional information.

Hazardous components

Chemical name and	Content %	OSHA Exposure	ACGIH Exposure
Acrylonitrile Butadiene Styrene, (CAS No.:9003-56-9)	≤100	None	None

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Acrylonitrile (CAS No.:107-13-1)	≤0.1	None	None
Butadiene (CAS No.:106-99-0)	≤0.1	None	None
Styrene (CAS No.:100-42-5)	≤0.1	None	None

If inhaled : Essentially no fumes will be released from heated material, if respiratory irritation occurred immediately remove a person to

fresh air and consult a doctor.

In case of skin contact : Contact with heated material, rinse the skin with

water and soap for at least 15 minutes. If symptoms

persist, consult a doctor.

In case of eye contact : Contact with material, rinse opened eye for at least 15 minutes

with plenty of water. If symptoms persist, consult a doctor.

If swallowed : Drink water as a precaution. Never give anything by mouth to an

unconscious person. Do not induce vomiting without medical

advice. Call a physician immediately.

Notes to physician : Treat symptomatically.

Suitable extinguishing

media

: Foam, Water, Carbon dioxide (CO₂), Dry chemical, Alcohol resistant foams are preferred if available. General-purpose synthetic foams (including AFFF) or protein foams may function, but much less

effectively.

Specific hazards during

firefighting

: Do not allow run-off from fire fighting to enter drains

or water courses.

Hazardous combustion

products

: Burning produces hydrogen cyanide (HCN),

acrylonitrile (AN), <u>styrene</u> (SM), carbon monoxide (CO), carbon dioxide (CO2), Nitric oxide (NO).

Specific extinguishing

methods

: Product is compatible with standard fire-fighting

agents.

Remove the flammability.

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Under fire conditions

: Cool containers / tanks with water spray. Water mist may be used to cool closed containers. Fine dust dispersed in air may ignite. Risks of ignition

dispersed in air may ignite. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

Special protective equipment for firefighters

: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

≥400°C

Autoignition temperature

Personal precautions, protective equipment and emergency procedures Environmental precautions

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

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

Methods and materials for containment and cleaning up

: Clean up promptly by scoop or vacuum. Sweep up and shovel into suitable containers for disposal.

Advice on safe handling

: Use personal protective equipment. Avoid contact with skin and eyes. Low hazard for usual industrial or commercial handling. Workers should be protected from the possibility of contact with

molten material during fabrication.

Avoid dust formation. If small particles are generated during further processing, handling, or by other means, combustible

dust concentrations in air may form.

Conditions for safe

Materials to avoid

storage

: Keep cool and dryplace. No special restrictions on storage with other products.

: Avoid fire , dust and electrostatic.

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Exposure measures:

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. Provide appropriate exhaust ventilation at places where dust is formed.

Engineering measures: Where reasonably practicable this should be

achieved by the use of local exhaust ventilation and

good general extraction. Provide appropriate exhaust ventilation at places where dust is formed.

Personal protective equipment

Respiratory protection : Respirator must be worn if exposed to dust. Wear

respirator with dust filter. Consult an industrial hygiene professional prior to respirator selection and use. Use a postive-pressure air supplied

respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where airpurifying respirators may not provide adequate

protection.

Eye protection : Safety glasses with side-shields. Goggles.

Skin and body

protection

: Impervious clothing.

Breath protection : Use a mask when printing.

Physical state : Solid Odour : None

Diameter : 1.75/2.85mm

Softening temperature : 104℃

Molecular weight : 100,000~200,000

Density : 1.04g/cm³ Water solubility : Insolutable

Reactivity : None expected under conditions of normal use.

Chemical stability : Stable under recommended storage conditions.

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Possibility of hazardous

reactions

: Product will not undergo hazardous polymerization.

Conditions to avoid : High temperature and fire.

Incompatible materials

Hazardous

decomposition products

: Oxidizing agents, Strong bases, Organic solvent Burning produces hydrogen cyanide (HCN),

acrylonitrile (AN), <u>styrene</u> (SM), carbon monoxide (CO), carbon dioxide (CO2), Nitric oxide (NO).

Information on likely routes of exposure

: Inhalation Skin contact

Eye Contact Ingestion

Acute toxicity

There were no target organ effects noted following ingestion or dermal exposure in animal studies.

Skin corrosion/irritation/

Decomposition of smoke and gas may be irritating to eyes, skin and respiratory system.

Serious eye damage/eye irritation

Product dust may be irritating to eyes, skin and respiratory system. Resin particles, like other inert materials, are mechanically irritating to eyes..

Respiratory or skin sensitisation

Product dust may be irritating to eyes, skin and respiratory system.

Germ cell mutagenicity

Not mutagenic in AMES Test..

Carcinogenicity

None of the components of this product are listed as carcinogens by IARC, NTP, or OSHA.

Reproductive toxicity

No data is available on the product itself

STOT - single exposure

There were no target organ effects noted following ingestion or dermal exposure in animal studies.

STOT - repeated exposure

There were no target organ effects noted following ingestion or dermal exposure in

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animal studies.

Aspiration toxicity

Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough. Burning produces irritant fumes.

Further information Carcinogenicity:

IARC No component of this product present at levels

greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by

IARC.

OSHANo component of this product present at levels

greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP No component of this product present at levels

greater than or equal to 0.1% is identified as a known

or anticipated carcinogen by NTP.

Ecotoxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : EC50/72h/algae > 1100 mg/L

Persistence and degradability

Unlikely degradable under industrial composting conditions

Disposal method

General advice : In accordance with local and national regulations.

Should not be released into the environment. Do not contaminate ponds, waterways or ditches with chemical or used container. Contact manufacturer.

Contaminated packaging

: Empty remaining contents.Do not re-use empty

containers. Empty containers should be

transported/delivered using a registered waste

carrier to local recyclers for disposal.

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International transport regulations

REGULATION PROPER SHIPPING *HAZARD SUBSIDIAR PACKIN MARINE ID **NUMBER** NAME CLASS Y HAZARDS **POLLUTAN** G T / LTD. GROUP QTY. U.S. DOT - ROAD Not dangerous goods **U.S. DOT - RAIL** Not dangerous goods **U.S. DOT - INLAND WATERWAYS** Not dangerous goods TRANSPORT CANADA - ROAD Not dangerous goods TRANSPORT CANADA - RAIL Not dangerous goods TRANSPORT CANADA - INLAND WATERWAYS Not dangerous goods

INTERNATIONAL MARITIME DANGEROUS GOODS

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	Not	
	dangerous	
	goods	
NTERNATIONAL AIR TE	RANSPORT ASSOCIATION - CARGO	
	Not	
	dangerous	
	goods	
NTERNATIONAL AIR TE	RANSPORT ASSOCIATION - PASSENGER	
	Not	
	dangerous	
	goods	
MEXICAN REGULATION	FOR THE LAND TRANSPORT OF HAZARDOUS	
MATERIALS AND WAST	ES	
	Not	
	dangerous	
	goods	
	3 · · · ·	
ORM = ORM-D, CBL = C	COMBUSTIBLE LIQUID	
Marine pollutant	Ino	
I Marino pondiant		

SARA 311/312 Hazards : No SARA Hazards

SARA 313

: This material does not contain any chemical

Component(s)SARA

components with known CAS numbers that exceed

313

the threshold (De Minimis) reporting levels

established by SARA Title III, Section 313.

California Prop 65

This product does not contain any chemicals known

to State of California to cause cancer, birth defects,

or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA : On TSCA Inventory

DSL : All components of this product are on the Canadian

DS

AUSTR : On the inventory, or in compliance with the

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inventory

ENCS : On the inventory, or in compliance with the

inventory

KECL : On the inventory, or in compliance with the

inventory

PHIL : On the inventory, or in compliance with the

inventory

IECSC : On the inventory, or in compliance with the

inventory

inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA

Further information

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Further information

To the best of our knowledge, the information herein is accurate, However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein. All material may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.