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Section 1: Identification: Product identifier and chemical identity**Product identifier**

Product Name MB-SDS-TOUGH
Product Code(s) MB-SDS-TOUGH UE U

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended Use 3D Printing
Uses advised against Do not use in printers where temperatures exceed 250°C

Details of manufacturer or importer

<u>Manufacturer</u>	<u>Importer</u>	<u>Importer</u>
MakerBot Industries LLC One MetroTech Center, 21st Floor Brooklyn, NY 11201 USA 1 347 334 6800	Alloys Eden Park Centre, 128-140 Wellington St. Collingwood VIC 3066, Australia 03 9411 1813	TCL Hofmann VIC - Braeside 150 Woodlands Drive Braeside VIC 3195 Australia Phone: +613 8586 2900 Fax: +613 9580 8322

For further information, please contact

E-mail address info@Stratasys.com

Emergency telephone number

Emergency telephone number +61 2 8014 4558 - Australia - English Language response 24/7

Section 2: Hazard(s) identification**GHS Classification**

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Other hazards which do not result in classification

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. See section 7 for more information. See section 8 for more information.

Section 3: Composition and information on ingredients, in accordance with Schedule 8

Substance

Not applicable

Mixture

Chemical name	CAS No	Weight-%
Non-hazardous ingredients	Proprietary	Balance

Section 4: First aid measures

Description of first aid measures

Inhalation	No hazards which require special first aid measures. Move to fresh air in case of accidental inhalation of vapours or decomposition products. Get medical attention.
Eye contact	No hazards which require special first aid measures. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
Skin contact	No hazards which require special first aid measures. If skin irritation or rash occurs: Get medical advice/attention.
Ingestion	IF SWALLOWED. Rinse mouth thoroughly with water. Get immediate medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms Molten material may cause thermal burns.

Indication of any immediate medical attention and special treatment needed

Note to doctors Treat symptomatically.

Section 5: Firefighting measures

Suitable Extinguishing Media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the chemical No information available.

Special protective actions for fire-fighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Handle in accordance with good industrial hygiene and safety practice.

Methods for cleaning up Pick up and transfer to properly labelled containers.

Precautions to prevent secondary hazards

Prevention of secondary hazards Handle in accordance with good industrial hygiene and safety practice.

Section 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep tightly closed in a dry and cool place.

Incompatible materials None known based on information supplied.

Section 8: Exposure controls and personal protection

Note: No hazards are expected under normal use. Avoid generation of dust particles.

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special protective equipment required.

Skin and body protection When handling hot material, use heat resistant gloves.

Respiratory protection Minimise dust generation and accumulation. Wear respiratory protection.

Environmental exposure controls No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Monofilament
Odour	Slight. sweet.
Colour	Natural colour
Odour threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		Not applicable
Melting point / freezing point	150 - 180 °C	Not applicable
Boiling point / boiling range	°C	Not applicable
Flash point	No data available	None known
Evaporation rate		Not applicable
Flammability (solid, gas)		No data available
Flammability Limit in Air		None known
Upper flammability limit:		
Lower flammability limit		
Vapour pressure		None known
Vapour density		Not applicable
Relative density	No data available	Not applicable
Water solubility	Insoluble in water	
Solubility(ies)	Not applicable	Not applicable
Partition coefficient		Not applicable
Autoignition temperature	388 °C	Not applicable
Decomposition temperature	250	Not applicable
Kinematic viscosity		Not applicable
Dynamic viscosity		Not applicable

Other information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available
Particle Size	No information available
Particle Size Distribution	No information available

Section 10: Stability and reactivity

Reactivity

Reactivity Stable under recommended storage conditions.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials None known based on information supplied.

Hazardous decomposition products

Hazardous decomposition products Burning produces obnoxious and toxic fumes. Carbon monoxide. Carbon dioxide (CO₂). Aldehydes.

Section 11: Toxicological information**Acute toxicity****Information on likely routes of exposure****Product Information**

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.

Symptoms No information available.

Numerical measures of toxicity - Product Information

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

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity
 0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour)
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12: Ecological information

Ecotoxicity

Ecotoxicity

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation No information available.

Mobility

Mobility in soil No information available.

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Section 13: Disposal considerations

Disposal methods

Waste from residues/unused products Dispose of waste in accordance with environmental legislation. Dispose of in accordance with local regulations.

Contaminated packaging Not applicable.

Section 14: Transport information

ADG Not regulated

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL and the IBC Code
No information available

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Australia

See section 8 for national exposure control parameters

International Inventories

TSCA	Complies
DSL/NDSL	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	No information available
AIIC	No information available

Legend:

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

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Any other relevant information

Prepared By TSCA;
http://iaspub.epa.gov/sor_internet/registry/substreg/searchandretrieve/searchbylist/search.d
 IECSC; <http://cciss.cirs-group.com/>
 EU Regulation 1272/2008
 TOMES-LOLI®; <http://www.rightanswerknowledge.com/loginRA.asp>
 UN Recommendations on the transport of dangerous goods 19th Edition
 IARC Monographs on the Evaluation of Carcinogenic Risks to Humans;
<http://monographs.iarc.fr>
 ECHA CHEM;
<http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances>
 OECD SIDS; <http://webnet.oecd.org/Hpv/UI/Search.aspx>
 EPA; <http://www.epa.gov/iris>
 EPISUITE Program ver.4.1
 NIOSH (The National Institute for Occupational Safety and Health)
 ACGIH (American Conference of Governmental Industrial Hygienists)
 Waste Control Act enforcement regulation attached [1]
 National chemicals information systems; <http://ncis.nier.go.kr>
 Korea National Fire Agency-Korea dangerous material inventory management system;
<http://hazmat.mpss.kfi.or.kr/material.do>
 Korea Ministry of Employment and Labor Public Notice No. 2020-130
 Korea Ministry of Employment and Labor Public Notice No. 2020-48

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Revision Note

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

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

Disclaimer

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End of Safety Data Sheet