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Revision Number 2

Section 1: PRODUCT AND COMPANY IDENTIFICATION**Product identifier**

Product Name ABS Ivory
ABS M30 Ivory
ABS 30
ABS 30 Natural
P430 ABS Ivory
P430L ABS Ivory
P430XL Ivory

Product Code(s) SDS-000001 EN Z IVY

PN (Part Number) 311-20000 311-20018 333-60300 333-90300 340-21200 345-10005 345-42005 350-80100
355-02110 355-08110 360-50110 CQ703A

Other means of identification

Pure substance/mixture Mixture

Recommended use of the chemical and restrictions on use

Recommended Use Additive manufacturing

Uses advised against No information available

Details of the supplier of the safety data sheet**Importer**

Objective3D Ltd
BDO Taranaki Limited
10 Young Street
New Plymouth, New Plymouth 4310
New Zealand
Phone: +64 9 801 0380

For further information, please contact

Contact Point Product Safety Department

E-mail address info@Stratasys.com

Emergency telephone number

Emergency Telephone +64 9 929 1483 - New Zealand - English Language response

Section 2: HAZARDS IDENTIFICATION**GHS Classification**

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

Label elements

Other hazards

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

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable

Mixture

| Chemical name | CAS No. | Weight-% |
|---|-------------|----------|
| Acrylonitrile butadiene styrene polymer | 9003-56-9 | 80-100 |
| Non-hazardous ingredients | Proprietary | Balance |

Section 4: FIRST AID MEASURES

Description of first aid measures

| | |
|---------------------|--|
| Inhalation | Remove to fresh air. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash skin with soap and water when in contact with molten residues. |
| Ingestion | Drink plenty of water. Do not induce vomiting without medical advice. Call a physician immediately. |

Most important symptoms and effects, both acute and delayed

Symptoms None known.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Suitable Extinguishing Media Foam. Water. Carbon dioxide (CO2). Dry chemical. Alcohol resistant foam.

Unsuitable extinguishing media None known.

Specific hazards arising from the chemical

Specific hazards arising from the chemical None known.

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

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system. Keep out of waterways.

Methods and material for containment and cleaning up

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

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

Precautions to prevent secondary hazards

Prevention of secondary hazards Prevent dust cloud. Avoid dust accumulation in enclosed space. May form combustible dust concentrations in air if small particles are generated during further processing, handling or by other means. Remove all sources of ignition.

Section 7: HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid contact with skin and eyes, when handling melted filament. If small particles are generated during further processing, handling, or by other means, combustible dust concentrations in air may form. Use respirator.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Oxidizing agent. Strong bases.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Biological occupational exposure limits Not applicable.

Appropriate engineering controls

Engineering controls If dust is generated during further processing provide exhaust ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Goggles. Safety glasses with side-shields.

Skin and body protection Impervious clothing.

Respiratory protection Minimize 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
Odor No data available.
Color Characteristic
Odor threshold No information available

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|--------------------------------|---------------------------|-------------------------|
| pH | No data available | None known |
| Melting point / freezing point | No data available | None known |
| Boiling point / boiling range | No data available | None known |
| Flash point | >380 °C | |
| Evaporation rate | No data available | None known |
| Flammability (solid, gas) | No data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability limit: | No data available | |
| Lower flammability limit: | No data available | |
| Vapor pressure | No data available | None known |
| Vapor density | No data available | None known |
| Relative density | 1.02 - 1.07 | |
| Water solubility | Insoluble in water | |
| Solubility(ies) | No data available | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | No data available | None known |
| Decomposition temperature | >350 °C | |
| Kinematic viscosity | No data available | None known |
| Dynamic viscosity | No data available | None known |
| Explosive properties | No information available. | |
| Oxidizing properties | No information available. | |

Other Information

| | |
|----------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | negligible |
| 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 None under normal use conditions.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Excessive heat. To avoid thermal decomposition, do not overheat.

Incompatible materials

Incompatible materials Oxidizing agent. Strong bases.

Hazardous decomposition products

Hazardous decomposition products 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 None known.

Numerical measures of toxicity - Product Information

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

Unknown acute toxicity No information available
 100 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
 100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|-----------------|--------------------|-----------------|
| Acrylonitrile butadiene styrene polymer | >5000 mg/kg rat | >2000 mg/kg rabbit | - |

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.
Sensitization No information available.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.

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

| Chemical name | New Zealand | IARC |
|---|-------------|---------|
| Acrylonitrile butadiene styrene polymer - 9003-56-9 | | Group 3 |

IARC (International Agency for Research on Cancer) *Group 3 - Not Classifiable as to Carcinogenicity in Humans*

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 The environmental impact of this product has not been fully investigated

Unknown aquatic toxicity 1 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation Not likely to bioaccumulate.

Mobility

Mobility in soil No information available.

Mobility No information available.

Other adverse effects

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste treatment methods

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

Contaminated packaging Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

Road transport

ADG Not regulated

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No information available

Section 15: REGULATORY INFORMATION

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

New Zealand

Exposure Limits See Section 8 for any applicable Tolerable Exposure or Environmental Exposure Limits

Certified handlers, tracking and controlled substance licence requirements • Certified handlers are required for some substances. This includes for substances requiring a controlled substance licence, including Class 1 explosives, vertebrate toxic agents (9.3A, B, C), and certain fumigants. Class 6.1A and 6.1B substances such as

pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information.

- Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.
- Controlled substance licences are required to possess certain class 1 (explosive) and class 6 (vertebrate toxic agents or fumigants) substances. See Part 7 of the Health and Safety at Work Regulation 2017 for more information.

International Inventories

| | |
|---------------|----------|
| NZIoC | Complies |
| TSCA | Complies |
| DSL/NDSL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

- NZIoC** - New Zealand Inventory of Chemicals
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
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
AICS - Australian Inventory of Chemical Substances

International Regulations

Ozone-depleting substances (ODS) Not applicable

Persistent Organic Pollutants Not applicable

Export Notification requirements Not applicable

Section 16: OTHER INFORMATION

Revision Date 18-Dec-2019

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 | | |

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End of Safety Data Sheet