1. Identification

1.1 Identification

Product Name: IC3D Standard TPE-SEBS-95A Natural

Additional Identification

Chemical name: Thermoplastic Elastomer

1.2 Recommended use and restriction on use

Recommended use: Filament

Restrictions on use: None identified.

1.3 Details of the supplier of the safety data sheet

Supplier

Company Name: IC3D, Inc
Address: 1697 Westbelt Drive
          Columbus, OH 43228
Telephone: 614-344-0414

2. Hazard(s) identification

<table>
<thead>
<tr>
<th>Section</th>
<th>Hazard class</th>
<th>Category</th>
<th>Hazard Class &amp; Category</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.6</td>
<td>Carcinogenicity</td>
<td>1A</td>
<td>Carc. 1A</td>
<td>H350</td>
</tr>
</tbody>
</table>

2.1 Hazard Classification

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

2.2 Label Elements:

Hazard Symbol: GHS08

Signal Word: Danger

Hazard Statement: H305 May cause cancer.

Precautionary Statements:

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
280 - Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 - If exposed or concerned: Get medical advice/attention.
405 - Store locked up.
501 - Dispose of contents/container in accordance with local/regional/national/international regulations

Hazardous ingredients for labelling: quartz

Other hazards which do not Result in GHS classification: None identified

Results of PBT and vPvB assessment
3. Composition/information on ingredients

3.1 Description of the mixture: Thermoplastic elastomer with additives

<table>
<thead>
<tr>
<th>Name of Substance</th>
<th>Identifier</th>
<th>Wt%</th>
<th>Classification acc. to GHS</th>
<th>Pictogram</th>
<th>Notes</th>
<th>Specific Conc. Limits</th>
<th>M-Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>CAS No 14808-60-7</td>
<td>0.1-&lt;1</td>
<td>Carc. 1A/H350 STOT RE 1/H372</td>
<td>IARC: 1</td>
<td>IOELV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- IARC: 1: IARC group 1: carcinogenic to humans (International Agency for Research on Cancer)
- IOELV: Substance with a community indicative occupational exposure limit value

Composition Comments: Components are not hazardous or are below required disclosure limits.

4. First-aid measures

4.1 Description of first aid measures

Ingestion: Rinse mouth. Do not induce vomiting. Get medical advice/attention.

Inhalation: Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions

Skin Contact: Rinse skin with water/shower. After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water and soap.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.

General Notes: Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

4.2 Information for physician

- Most important symptoms/effects, acute and delayed: This information is not available.
- Indication of immediate medical attention and special treatment needed: None

5. Fire-fighting measures

5.1 Extinguishing media

- Suitable extinguishing media: water, foam, alcohol resistant foam, fire extinguishing powder
- Unsuitable extinguishing media: water jet

5.2 Specific hazards during fire fighting
Specific hazards arising from the chemical:
Hazardous decomposition products: Section 10. Deposited combustible dust has considerable explosion potential. Hazardous combustion products: carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters:
In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

Special protective equipment for fire-fighters: Self-contained breathing apparatus (SCBA)

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:
For nonemergency personnel: Remove persons to safety. Ventilate affected area. Control of dust. Eliminate all ignition sources if safe to do so. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wearing of suitable protective equipment (including personal equipment referred to under Section 8) to prevent any contamination of skin, eyes and personal clothing.
For emergency responders: Wear breathing apparatus if exposed to vapors/dust/aerosols/gases

6.2 Environmental Precautions: Keep away from drains, surface and groundwater. Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up:
Advice on how to contain/clean a spill: take up mechanically. Collect spillage.
Other information relating to spills and releases: place in appropriate containers of disposal. Ventilate affected areas.

Reference to other sections:
Hazardous combustion products: see section 5
Personal protective equipment: see section 8
Incompatible materials: see section 10
Disposal considerations: see section 13

7. Handling and storage

7.1 Advice on protection against fire and explosion:
Measures to prevent fire as well as aerosol and dust generation: Use local and general ventilation. Keep away from sources of ignition - no smoking.

7.2 Precautions for safe handling:
Specific notes: Dust deposits may accumulate on all deposition surfaces in a technical room.
Measures to protect the environment: avoid release to the environment
Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wash hands thoroughly after handling. Preventive skin protection (barrier creams/ointments) is recommended.

7.3 Conditions for safe storage, including any incompatibilities:
Explosive atmospheres: removal of dust deposits
Flammability hazards: Keep away from sources of ignition - no smoking.
Incompatible substances or mixtures: Incompatible materials: see section 10
8. Exposure controls/personal protection

8.1 Ingredients with workplace control parameters:

<table>
<thead>
<tr>
<th>Country</th>
<th>Name of agent</th>
<th>CAS No</th>
<th>Identifier</th>
<th>TWA (ppm)</th>
<th>TWA (mg/m³)</th>
<th>STEL (ppm)</th>
<th>STEL (mg/m³)</th>
<th>Notation</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>Particulates not otherwise regulated</td>
<td>PEL (CA)</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>dust</td>
<td>Cal/OSHA PEL</td>
</tr>
<tr>
<td>US</td>
<td>Particulates not otherwise regulated</td>
<td>PEL (CA)</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>r</td>
<td>Cal/OSHA PEL</td>
</tr>
<tr>
<td>US</td>
<td>Particulates not otherwise classified</td>
<td>REL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>appx-D</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td>US</td>
<td>Particulates not otherwise classified (PNOC)</td>
<td>PEL</td>
<td>1,766</td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td>i, dust</td>
<td>29 CFR 1910.1000</td>
</tr>
<tr>
<td>US</td>
<td>Particulates not otherwise classified (PNOC)</td>
<td>PEL</td>
<td>529.5</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>partml, r, dust</td>
<td>29 CFR 1910.1000</td>
</tr>
<tr>
<td>US</td>
<td>talc</td>
<td>14807-96-6</td>
<td>PEL (CA)</td>
<td>1</td>
<td></td>
<td></td>
<td>+asb, fib/cm³</td>
<td></td>
<td>Cal/OSHA PEL</td>
</tr>
<tr>
<td>US</td>
<td>talc</td>
<td>14807-96-6</td>
<td>PEL (CA)</td>
<td>0.1</td>
<td>1 (30 min)</td>
<td>no_asb, fib/ml</td>
<td></td>
<td>29 CFR 1910.1000</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>talc</td>
<td>14807-96-6</td>
<td>PEL (CA)</td>
<td>2</td>
<td></td>
<td></td>
<td>no_asb, r, less 1 silica</td>
<td>Cal/OSHA PEL</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>talc</td>
<td>14807-96-6</td>
<td>PEL</td>
<td>706</td>
<td></td>
<td></td>
<td>partml, noAsb_less1Sil,r</td>
<td>29 CFR 1910.1000</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>talc</td>
<td>14807-96-6</td>
<td>REL</td>
<td>2 (10 h)</td>
<td></td>
<td></td>
<td>r, less1silica, no_asb</td>
<td>NIOSH REL</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>quartz</td>
<td>14808-60-7</td>
<td>PEL (CA)</td>
<td>0.05</td>
<td></td>
<td></td>
<td>r</td>
<td>Cal/OSHA PEL</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>silica, crystalline-quartz</td>
<td>14808-60-7</td>
<td>PEL</td>
<td>0.05</td>
<td></td>
<td></td>
<td>r</td>
<td>29 CFR 1910.1000</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>silica, crystalline-quartz</td>
<td>14808-60-7</td>
<td>REL</td>
<td>0.05 (10 h)</td>
<td></td>
<td></td>
<td>r, appx-A</td>
<td>NIOSH REL</td>
<td></td>
</tr>
</tbody>
</table>

Notation
8.2 Individual protection measures, such as personal protective equipment

**Eye/face protection:** Wear eye/face protection

**Hand Protection:** Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

**Respiratory protection:** In case of inadequate ventilation wear respiratory protection. Particulate filter device (EN 143).

8.3 Environmental exposure controls:

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and groundwater.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Appearance</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state:</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Form:</strong></td>
<td>Filament</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>White to yellowish</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Characteristic</td>
</tr>
<tr>
<td><strong>Odor threshold:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Melting Point:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Boiling Point:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flash Point:</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
<td>Combustible, but will not ignite readily</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper/lower limit on flammability or explosive limits</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammability limit - upper (%):</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability limit - lower (%):</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosive limit - upper (%):</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Explosive limit - lower (%):</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>
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Vapor pressure: No data available
Vapor density: No data available
Relative density: No data available

**Solubilities**
- Solubility in water: Insoluble
- Solubility (other): No data available

Partition coefficient (n-octanol/water): No data available
Auto-ignition temperature: Not relevant (solid matter)
Decomposition temperature: No data available
Viscosity: Not relevant (solid matter)

### 10. Stability and reactivity

**10.1 Reactivity:** This material is not reactive under normal ambient conditions.

**10.2 Chemical Stability:** The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

**Possibility of hazardous reactions:** No known hazardous reactions.

**Conditions to avoid:** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

**Incompatible Materials:** Oxidizers

**Hazardous Decomposition Products:** Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

### 11. Toxicological information

**11.1 Information on toxicological effect**

**Classification procedure:** If not otherwise specified the classification is based on: ingredients of the mixture (additivity formula)


**Acute toxicity:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

**Skin Corrosion/Irritation:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

**Serious Eye Damage/Eye Irritation:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

**Respiratory sensitization:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

**Skin sensitization:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

**Carcinogenicity:** May cause cancer

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans

https://ic3dprinters.com/
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### Name of substance | CAS No | Classification | Remarks | Number
---|---|---|---|---
quartz | 14808-60-7 | 1 | in the form of quartz or cristobalite | 1

1 Carcinogenic to humans

**US. National Toxicology Program:** None of the ingredients are listed.

**OSHA Carcinogens:** None of the ingredients are listed.

**Germ Cell Mutagenicity:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

**Reproductive toxicity:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

**Specific Target Organ Toxicity - Repeated Exposure:** Classification could not be established because data are lacking, inconclusive, or conclusive but not sufficient for classification

12. Ecological information

12.1 Toxicity

**Aquatic toxicity (acute):** Test data are not available for the complete mixture.

**Aquatic toxicity (chronic):** Test data are not available for the complete mixture.

12.2 Persistence and Degradability

**Biodegradation:** No data available  
**Persistence:** No data available

12.3 Bio accumulative potential: Test data are not available for the complete mixture.

12.4 Mobility in soil: No data available

12.5 Other adverse effects: No data available  
**Results of PBT & vPvB assessment:** No data available  
**Remarks:** Wassergefährdungsklasse, WGK (water hazard class): 1

13. Disposal considerations

13.1 Waste treatment methods: 
Dispose of contents/container in accordance with local/regional/national/international regulations.  
**Sewage disposal-relevant information:** Do not empty into drains.  
**Waste treatment of containers:** Handle contaminated packages in the same way as the substance itself.  
**Remarks:** Please consider the relevant national or regional provisions.

14. Transport information

14.1 International Regulations
14.2 Domestic Regulation
Transport of dangerous goods by road or rail (49 CFR US DOT). Not subject to transport regulations

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question
National regulations (United States)
Superfund Amendments and Reauthorization Act of 1986 (SARA Title III)
The list of Extremely Hazardous Substances and Their Threshold Planning Quantities
(EPCRA Section 302, 304) - None of the ingredients are listed

Specific Toxic Chemical Listings (EPCRA Section 313) - None of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
List of Hazardous Substance and Reportable Quantities (CERLA Section 102a) (40 CFR 302.4) - None of the ingredients are listed

Clear Air Act - None of the ingredients are listed

Right to Know Hazardous Substance List
Hazardous Substance List (NJ-RTK)

<table>
<thead>
<tr>
<th>Name of substance</th>
<th>CAS No</th>
<th>Remarks</th>
<th>Classifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>quartz</td>
<td>14808-60-7</td>
<td>-</td>
<td>CA.</td>
</tr>
</tbody>
</table>

CA Carcinogenic

15.2 Chemical Safety Assessment
CA Regulations: The following warning is given to Proposition 65:

WARNING: TPE-SEBS-95A filaments when used for 3D Printing can expose you and others nearby to Silica, a chemical known to the State of California to cause cancer. www.P65Warnings.ca.gov/
ALWAYS USE THIS PRODUCT IN A WELL VENTILATED AREA

15.3 Industry or sector specific available guidance(s)

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic</td>
<td>*</td>
<td>chronic (long-term) health effects may result from repeated overexposure</td>
</tr>
</tbody>
</table>
Health 0 no significant risk to health

Flammability 2 material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur

Physical Hazard 0 material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive.

Personal Protection -


<table>
<thead>
<tr>
<th>Category</th>
<th>Degree of Hazard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>2</td>
<td>material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur</td>
</tr>
<tr>
<td>Health</td>
<td>0</td>
<td>material that, under emergency conditions, would offer no hazard beyond that of ordinary combustible material</td>
</tr>
<tr>
<td>Instability</td>
<td>0</td>
<td>material that is normally stable, even under fire conditions</td>
</tr>
<tr>
<td>Special Hazard</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

16. Other information

Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbr.</th>
<th>Descriptions of used abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>49 CF US DOT</td>
<td>49 CFR U.S. Department of Transportation</td>
</tr>
<tr>
<td>Cal/OSHA PEL</td>
<td>California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)</td>
</tr>
<tr>
<td>Carc.</td>
<td>Carcinogenicity</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)</td>
</tr>
<tr>
<td>DGR</td>
<td>Dangerous Goods Regulations (see IATA/DGR)</td>
</tr>
<tr>
<td>GHS</td>
<td>“Globally Harmonized System of Classification and Labelling of Chemicals” developed by the UN</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IARC Monographs</td>
<td>IARC Monographs on the Evaluation of Carcinogenic Risks to Humans</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
</tbody>
</table>
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**Version:** 2.0  
**Revision Date:** 2/18/22

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>IATA/DGR</td>
<td>Dangerous Goods Regulations (DGR) for the air transport (IATA)</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>MARPOL</td>
<td>International Convention for the Prevention of Pollution for Ships (abb. of &quot;Marine Pollutant&quot;)</td>
</tr>
<tr>
<td>NIOSH REL</td>
<td>National Institute for Occupational Safety and Health (NIOSH): Recommended Exposure Limits (RELs)</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration (United States)</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent, Bioaccumulative and Toxic</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible exposure limit</td>
</tr>
<tr>
<td>ppm</td>
<td>Parts per million</td>
</tr>
<tr>
<td>RTECS</td>
<td>Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-term exposure limit</td>
</tr>
<tr>
<td>STOT RE</td>
<td>Specific target organ toxicity - repeated exposure</td>
</tr>
<tr>
<td>TWA</td>
<td>Time-weighted average</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and very Bioaccumulative</td>
</tr>
</tbody>
</table>

**Key literature references and sources for data**  
Transport of dangerous goods by road or rail (49 CFR US DOT).  
International Maritime Dangerous Goods Code (IMDG).  
Dangerous Goods Regulations (DGR) for the air transport (IATA).

**Classification procedure**  
Physical and chemical properties  
Health hazards.  
Environmental hazards.  
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**List of relevant phrases (code and full text as stated in chapter 2 and 3)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>H350</td>
<td>May cause cancer</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure.</td>
</tr>
</tbody>
</table>

Disclaimer: This data sheet is based on information from source material supplier(s) and other parties and is, to the best of IC3D's knowledge, accurate and reliable as of the date compiled. However, IC3D makes no representation or guarantee as to the accuracy, reliability, or completeness of the information. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION. This information relates to the specific material designated and may not be valid if the material is used in combination with any other materials or in any particular process. It is the user's responsibility to determine the suitability of the material for a particular use. IC3D does not accept liability for any loss or damage that may result from the use of this information.