

Safety Data Sheet

**Section 1: Identification of the Substance/Mixture and of the Company/Undertaking****1.1 Product identifier**

- Product Name** • **StrataJac**
Synonyms • Engineered Elastomer

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

- Relevant identified use(s)** • Plastic pellets to be melted and molded

1.3 Details of the supplier of the safety data sheet

- Manufacturer** • AFL Telecommunications
170 Ridgeview Circle
Duncan, SC 29334
United States
www.aflglobal.com
Telephone (General) • 1-864-433-0333

1.4 Emergency telephone number

- Manufacturer** • 1-800-866-3941 Ext. 5577 - USA
Manufacturer • 1-864-433-5577

Section 2: Hazards Identification**EU/EEC**

According to Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010]
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

- CLP** • Not classified
DSD/DPD • Not classified

2.2 Label Elements

- CLP**
Hazard statements • No label element(s) required
DSD/DPD
Risk phrases • No label element(s) required

2.3 Other Hazards

- CLP** • According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.
DSD/DPD • According to European Directive 1999/45/EC this preparation is not considered dangerous.

UN GHS

According to Third Revised Edition

2.1 Classification of the substance or mixture

- UN GHS
- Not classified

2.2 Label elements

- UN GHS
- Hazard statements**
- No label elements specifically required.

2.3 Other hazards

- UN GHS
- According to the Globally Harmonized System for Classification and Labeling (GHS) this product is not considered hazardous.
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United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

- OSHA HCS 2012
- Not classified

2.2 Label elements

- OSHA HCS 2012
- Hazard statements**
- No label element(s) required

2.3 Other hazards

- OSHA HCS 2012
- This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.
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Canada

According to WHMIS

2.1 Classification of the substance or mixture

- WHMIS
- Not classified

2.2 Label elements

- WHMIS
- No label element(s) required

2.3 Other hazards

- WHMIS
- In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).
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Section 3 - Composition/Information on Ingredients

3.1 Substances

- This material is a substance.

3.2 Mixtures

- Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

- Move victim to fresh air.

Skin

- Wash skin with soap and water. If skin irritation occurs: Get medical advice/attention. For contact with molten product, do not remove contaminated clothing. Flush skin immediately with large amounts of cold water. If possible submerge area in cold water. Pack with ice. DO NOT attempt to peel polymer from skin. Seek medical attention immediately.

Eye

- Treat as any foreign particulate matter. If hot melted material should splash into the eyes, flush eyes immediately with water for 15 minutes while holding the eyelids open. See a physician for treatment.

Ingestion

- Treat symptomatically. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

- All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media

- Water spray, dry chemical, foam.

Unsuitable Extinguishing Media

- CO2 may be ineffective on large fires.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- Solid does not readily release flammable vapors. Thermoplastic polymers can burn. Large masses of molten polymer held at elevated temperatures for extended periods of time may auto-ignite.

Hazardous Combustion Products

- Irritating or toxic substances will be emitted upon burning, combustion or decomposition.

5.3 Advice for firefighters

- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

- Do not walk through spilled material.

Emergency Procedures

- Use normal clean up procedures.

6.2 Environmental precautions

- LARGE SPILLS: Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Avoid generating dust. Carefully shovel or sweep up spilled material and place in suitable container.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Loading and unloading operations may cause nuisance dust to form. Refer to Processing Guide and/or contact your local Technical Service representative for melt processing temperature range. For most thermoplastic polyurethanes, melt processing is in the range of 177 - 232 deg. C (350 - 450 deg. F), however, some products may process at different temperatures. Heating above 232 deg. C (450 deg. F) can generate hazardous decomposition products. Conduct any operations emitting fumes or vapors (including thermo-forming, heat joining, cutting and or sealing of articles and clean up) under well-ventilated conditions. Avoid breathing process vapors. Do not hold product for extended periods of time at elevated temperatures or allow thick masses of hot polymer to accumulate because they can decompose emitting hazardous gasses. Do not taste, swallow, or chew products. Wash thoroughly after processing. Do not store or consume food in processing areas. Fume condensates may include hazardous contaminants from additives. Condensate may be combustible and should be periodically removed from exhaust hoods, ductwork, and other surfaces. Impervious gloves should be worn during cleanup operations to prevent skin contact. Post thermal processing activities necessary to produce molded articles (such as cutting, sanding, sawing, grinding, drilling, or regrinding) may create dust or "fines." Powders, dust, and/or fines may pose a dust explosion hazard. Do not steam sterilize articles made with Estane TPU resins. Methylene dianiline can be formed under these conditions. Electrostatic buildup may occur when pouring or transferring this product from its container. The spark produced may be sufficient to ignite vapors of flammable liquids. Always transfer product by means which avoid static buildup. Avoid pouring product directly from its container into combustible or flammable solvent. The major off-gasses from normal melt processing are expected to be water vapor and carbon dioxide. Other trace volatile organic components may also be emitted. Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Use good housekeeping measures to prevent dust accumulations. Store in well ventilated place.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines

- No exposure limits have been established.

8.2 Exposure controls

Engineering Measures/Controls

- Use with adequate ventilation.

Personal Protective Equipment

Respiratory

- Under normal use conditions, respirator is not usually required. Use appropriate NIOSH/MSHA respiratory protection if the recommended exposure limit is exceeded, or if exposure to vapors is likely. Cutting operations may create small particles from this product. If inhalation of particulates cannot be avoided, wear a dust respirator. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Eye/Face

- Wear safety glasses.

- Hands**
- Wear appropriate gloves.
- Skin/Body**
- Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves. Long sleeve shirt is recommended.
- General Industrial Hygiene Considerations**
- Wash hands before eating.
- Environmental Exposure Controls**
- Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Natural colored solid plastic pellets with a faint odor.
Color	Natural colored.	Odor	Faint
Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point	Data lacking
Decomposition Temperature	232 C(449.6 F)	pH	Data lacking
Specific Gravity/Relative Density	1.2 Water=1	Water Solubility	Insoluble
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	Data lacking	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

9.2 Other Information

- No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

- Stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions

- Hazardous polymerization not indicated.

10.4 Conditions to avoid

- Not determined.

10.5 Incompatible materials

- None known, avoid contact with reactive chemicals.

10.6 Hazardous decomposition products

- Thermal decomposition products include smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Under combustion conditions, oxides of the following elements will be formed: nitrogen. May also include isocyanates and small amounts of hydrogen cyanide.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Carcinogenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Germ Cell Mutagenicity	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Skin sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
STOT-RE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
STOT-SE	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Toxicity for Reproduction	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Respiratory sensitization	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met OSHA HCS 2012 • Classification criteria not met UN GHS • Classification criteria not met

Route(s) of entry/exposure • Inhalation, Skin, Eye, Ingestion

Potential Health Effects

Inhalation

Acute (Immediate)

- Not expected to cause eye irritation. Based on data from similar materials. Particulates may cause mechanical irritation. At processing or combustion temperatures this product may emit fumes and vapors that cause irritation, possibly severe, to the eyes. Overexposure to vapors or mist may cause dizziness, headache, nausea, and/or flu-like symptoms.

Chronic (Delayed)

- No data available to indicate product or components may be respiratory sensitizers.

Skin**Acute (Immediate)**

- Not expected to be a primary skin irritant. Based on data from similar materials. Contact with heated polymer may cause thermal burns and adhesion of solidified product to the skin. The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials. No data available to indicate product or components may be a skin sensitizer.

Chronic (Delayed)

- No data available.

Eye**Acute (Immediate)**

- Not expected to cause eye irritation. Based on data from similar materials. Particulates may cause mechanical irritation. At processing or combustion temperatures this product may emit fumes and vapors that cause irritation, possibly severe, to the eyes.

Chronic (Delayed)

- No data available.

Ingestion**Acute (Immediate)**

- The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials. Ingestion of this material may cause gastrointestinal irritation.

Chronic (Delayed)

- No data available.

Mutagenic Effects

- No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenic Effects

- No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

Reproductive Effects

- No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

11.2 Other information

- Under decomposition conditions, isocyanates may be generated from this product. Isocyanates can cause skin sensitization and/or respiratory sensitization. Pre-existing skin conditions may be aggravated by prolonged or repeated exposure. Persons with sensitive airways (e.g., asthmatics) may react to vapors.

Section 12 - Ecological Information

12.1 Toxicity

- Not determined.

12.2 Persistence and degradability

- Adequate data is not available to estimate the biodegradation potential of this material.

12.3 Bioaccumulative potential

- 1 - 10% of the components bioconcentrate in aquatic organisms.

12.4 Mobility in Soil

- Not determined.

12.5 Results of PBT and vPvB assessment

- No PBT and vPvB assessment has been conducted.

12.6 Other adverse effects

- Not determined.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

- Product waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
- Packaging waste**
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not regulated	NDA	NDA	NDA
TDG	NDA	Not regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not regulated	NDA	NDA	NDA

14.6 Special precautions for user

- None known.

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

- Not relevant.

Section 15 - Regulatory Information

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

SARA Hazard Classifications

- None

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- USA- All components of this material are in compliance with Section 5 of TSCA. This material is manufactured under the Polymer Exemption rule. Other TSCA Reg.- None known. Japan- All components are in compliance with the Chemical Substances Control Law of Japan. Australia- This product requires notification before sale in Australia. New Zealand- All components are in compliance with chemical notification requirements in New Zealand. Canada- This product requires notification before sale in Canada. Switzerland- All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland. Korea- This product requires notification before sale in Korea. Philippines All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969). China- This product requires notification in China. Taiwan- May require notification before sale in Taiwan. SARA Ext. Haz. Subst.- This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list. SARA Section 313- This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313. Cal. Prop. 65 This product contains chemicals(s) known to the state of California to cause cancer and/or birth defects. Miscellaneous Regulatory Information- Not determined.

Section 16 - Other Information

Last Revision Date ● 23/December/2013

Preparation Date ● 23/December/2013

Disclaimer/Statement of Liability ● No data available

Key to abbreviations

NDA = No data available
