

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

076697965

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

076697957 076697973 076697981 076697999 076698153 076698195

# TAK Systems

## SAFETY DATA SHEET

### 1. Identification

<b>Product Identifier:</b>	<b>Hydroplastic</b>
<b>Recommended Use:</b>	Plastic Manufacturing and fabrication.
<b>Recommended Restriction:</b>	In accordance with manufacturers recommendations
<b>Manufacturer/ Supplier:</b>	TAK Systems
<b>Address:</b>	PO Box 939 East Wareham, MA 02538
<b>Telephone:</b>	508-295-9630
<b>Website:</b>	<a href="http://www.taksystems.com">www.taksystems.com</a>

### 2. Hazard(s) Identification

<b>Physical Hazards:</b>	The substance is not classified according to the Globally Harmonized Systems (GHS)
<b>Health Hazards:</b>	The substance is not classified according to the Globally Harmonized Systems (GHS)
<b>OSHA Defined Hazards:</b>	The substance is not classified according to the Globally Harmonized Systems (GHS)

#### Label Elements

<b>Hazard Symbol:</b>	Not applicable.
<b>Signal Word:</b>	Not applicable.
<b>Hazard Statement:</b>	Not applicable
<b>Precautionary Statement:</b>	Not applicable
<b>Prevention:</b>	Not applicable
<b>Response:</b>	Not applicable
<b>Storage:</b>	Not applicable
<b>Disposal:</b>	Not applicable
<b>Hazard(s) not Otherwise Classified (HNOC):</b>	Caution – substance not yet fully tested. Due to the structure of the Substance made on similar product we assume that the product is unclassified.

### 3. Composition/Information on Ingredients:

**Chemical Characterization:**

Substances Yes

**Chemical Components:**

Homopolymer > 99%

### 4. First Aid Measure

**Inhalation:**

First aid measures not required, but get fresh air for personal comfort.

**Skin Contact:**

First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.

**Eye Contact:**

Rinse opened eye for several minutes under running water.

**Ingestion:**

Rinse mouth with water. If a large quantity has been ingested or you feel unwell, get medical advice/attention

**Most important  
Symptoms/effects, and  
Special Treatment Needed:  
General Information:**

No further relevant information available

No further relevant information available

### 5. Fire-Fighting Measures

**Suitable Extinguishing Media:**

Water. Foam. Carbon dioxide. Fire-extinguishing powder.

**Unsuitable Extinguishing Media:  
Specific Hazards Arising from  
The Chemical:**

Water with full jet.

In case of fire, the following can be released: Carbon monoxide (CO).  
Monomer (CAS 502-44-3)

**Special Protective Equipment  
And Precautions for Firefighters:**

Firefighters should wear appropriate protective equipment and selfcontained Breathing apparatus (SCBA) with a full face piece operated in positive pressure mode

### 6. Accidental Release Measures

**Personal Precautions,  
Protective Equipment and  
Emergency Procedures:**

Wear safety glasses, gloves, protective clothing and rubber boots for hygienic reasons.

**Methods and materials for  
Containment and Cleaning up:**

Pick up mechanically. Clean the affected area carefully, suitable cleaners are Water.

**Environmental Precautions:**

Do not allow to enter sewers/surface or ground water.

## **7. Handling and Storage**

**Precautions for Safe Handling:**

Wear personal protective equipment according to section 8 if risk of exposure. Keep away from Heat and direct sunlight.

**Conditions for Safe Storage,  
Including any Incompatibilities:**

Store only in the original receptacle. Store in cool, dry conditions in well sealed receptacles.

## **8. Exposure Controls/Personal Protection**

### **Control Parameters**

### **Components with Limit Values that Require Monitoring:**

This product does not contain any relevant quantities of materials with Critical values that have to be monitored.

### **OSHA –CA (Occupational Safety & Health Administration):**

Substance not listed

### **US. ACGIH Threshold Limit Values**

Substance not listed

### **US. NIOSH: Pocket Guide to Chemical Hazards**

Substance not listed

### **Individual Protection Measures, Such as Personal Protective Equipment:**

**Eye/Face Protection:**

Safety glasses

**Body Protection:**

Normal work clothes for the chemical industry (long legs and sleeves)

**Hand Protection:**

Protective gloves not required. However, we recommend using protective gloves made of rubber.

**Respiratory Protection:**

Not necessary if room is well ventilated. Wear respiratory device with dust Filter (minimum N95) in case of insufficient ventilation.

**General Hygiene Consideration:**

The usual precautionary measures for handling chemicals should be followed

**Limitation and supervision of Exposure into the Environment:**

Not applicable

## 9. Physical and Chemical Properties

**Appearance****Form:**

Granulate

**Color:**

White, Pink, Yellow or Blue

**Odor:**

Odorless

**Melting Point/Melting Range**

136-140°F (58-60°C)

**Initial Boiling Point and****Boiling Range:**

Not determined

**Flash Point:**

527°F (275°C)

**Flammability (solid, gas):**

Not determined

**Ignition Temperature****Decomposition Temperature:**

392°F (200°C)

**Danger of Explosion:**

Not explosive.

**Explosion Limits:**

Not applicable

**Oxidizing Properties:**

Not oxidizing

**Vapor Pressure:**

Not determined

**Density at 140°F (60°C):**

1.1 g/cm<sup>3</sup> (9.18 lbs/gal)

**Solubility in /Miscibility with****Water:**

Insoluble.

**Segregation coefficient****(n-octanol/water):**

Not determined

**Viscosity Dynamic:**

Not applicable

**Other Information:**

No further relevant information available

## 10. Stability and Reactivity

**Reactivity:**

There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.

**Chemical Stability:**

This product is stable at normal conditions.

**Thermal Decomposition/  
Conditions to Avoid:  
Possibility of Hazardous  
Reactions:**

To avoid thermal decomposition do not overheat.

No dangerous reactions known.

**Conditions to Avoid:  
Incompatible Materials:**

Heat.

Avoid contact with acids. Avoid contact with bases

**Hazardous Decomposition Products:**

Possible decomposition and release of monomer at temperatures above 392°F (200°C).

## 11. Toxicological Information:

### Information on toxicological Effects

**Acute Toxicity:**

**LD/LC50 Values:**

No Information available. The polymer is not bioavailable because of its molecular size.

**Skin Corrosion/Irritation:**

No information available.

**Serious Eye Damage/Eye**

**Irritation:**

No information available.

**Sensitization:**

No information available.

**Skin Sensitization:**

No information available.

**Carcinogenicity:**

No information available.

**Mutagenicity:**

No information available.

**Reproductive Toxicity:**

No information available.

**Remarks:**

Caution – substance not yet fully tested. Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

## 12. Ecological Information

**Toxicity:**

**Aquatic Toxicity:**

No information available. Hydroplastic is not bioavailable because of its molecular size.

**Persistence and Degradability:**

No information available.

**Other Information:**

The product is readily biodegradable.

**Bioaccumulative Potential:**

No information available.

**Mobility in Soil:**

No information available.

**Results of PBT and vPvB Assessment**

**PBT:**

No

**vPvB:**

No

**Other Adverse Effects:**

No further information available.

**Remark:**

Caution – substance not yet fully tested. Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

## 13. Disposal Considerations

**Disposal Instructions:**

This product is not classified as hazardous waste.

**Local Disposal Regulations:**

Disposal must be made according to official regulations.

**Contaminated Packaging:**

Contaminated packaging materials must be disposed of in the same manner as the product.

**Recommended Cleansing Agent:**

Water, if necessary with cleansing agents.

## 14. Transport Information

**UN Number**

DOT, ADR, ADN, IMDG, IATA

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**Proper Shipping Name (Technical Name)**

DOT, ADR, ADR, IMDG, IATA

--

**Transport Hazard Class(es)**

DOT, ADR, ADN, IMDG, IATA

--

**Packing Group**

DOT, ADR, IMDG, IATA

--

**Environmental Hazards:**

Not Applicable.

**Special Precautions for User:**

Not Applicable.

**Transport in Bulk according to Annex II**

**Of MARPOL 73/78 and the IBC Code:** Not Applicable.

**Transport/Additional Information:**

Not dangerous according to the above specifications.

## 15. Regulatory Information

Sara

### Section 355

**(Extremely Hazardous substances):** Substance is not listed.

### Section 313

**(Specific Toxic Chemical Listings:** Substance is not listed.

### Carcinogenic Categories

#### EPA

**(Environmental Protection Agency):** Substance is not listed.

#### IARC (International Agency

**for the Research on Cancer):** Substance is not listed.

**NTP (National Toxicology Program):** Substance is not listed.

### Inventory Status

#### Australian Inventory of Chemical

**Substances (AICS):** Substance is listed.

#### Canadian Domestic Substance

**List (DSL)** Substance is listed.

#### Canadian Non Domestic

**Substance List (NDSL):** Substance is not listed.

#### Chinese Chemical Inventory of Existing

**Chemical Substances (CIECS):** Substance is listed.

#### European EINECS/ELINCS Listing

Substance is not listed.

#### Japan Existing and New Chemical

**Substance List (ENCS)** Substance is listed.

#### Korea Existing Chemical

**Inventory (KECI):** Substance is listed.

#### Philippines Inventory of Chemicals

**And Chemical Substances (PICCS):** Substance is listed.

**TSCA Listing:** Substance is listed.

### Other Regulations, Limitations, and Prohibitive Regulations

#### State of California, Proposition 65:

**Chemicals Known to Cause Cancer:** Substance is not listed.

#### Chemicals Known to Cause

**Reproductive Toxicity for Females:** Substance is not listed.



**Chemicals Known to Cause  
Reproductive Toxicity for Males:  
Chemicals Known to Cause  
Developmental Toxicity:**

Substance is not listed.

Substance is not listed.

## **16. Other Information, Including Date of Preparation or Last Revision**

**Issue Date:** January 1, 2017

**Revision Date:** Not applicable.

**Version #:** 1

**Further Information:**

**HMIS Ratings:**

Health = 1  
Fire = 1  
Reactivity -- 0

**NFPA Ratings:**

Health = 1  
Fire = 1  
Reactivity -- 0

**Disclaimer:**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

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<b>Manufacturer/ Supplier:</b>	TAK Systems
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<b>Telephone:</b>	508-295-9630
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<b>OSHA Defined Hazards:</b>	The substance is not classified according to the Globally Harmonized Systems (GHS)

#### Label Elements

<b>Hazard Symbol:</b>	Not applicable.
<b>Signal Word:</b>	Not applicable.
<b>Hazard Statement:</b>	Not applicable
<b>Precautionary Statement:</b>	Not applicable
<b>Prevention:</b>	Not applicable
<b>Response:</b>	Not applicable
<b>Storage:</b>	Not applicable
<b>Disposal:</b>	Not applicable
<b>Hazard(s) not Otherwise Classified (HNOC):</b>	Caution – substance not yet fully tested. Due to the structure of the Substance made on similar product we assume that the product is unclassified.

### 3. Composition/Information on Ingredients:

**Chemical Characterization:**

Substances Yes

**Chemical Components:**

Homopolymer > 99%

### 4. First Aid Measure

**Inhalation:**

First aid measures not required, but get fresh air for personal comfort.

**Skin Contact:**

First aid measures not required, but wash exposed skin with soap and water for hygienic reasons.

**Eye Contact:**

Rinse opened eye for several minutes under running water.

**Ingestion:**

Rinse mouth with water. If a large quantity has been ingested or you feel unwell, get medical advice/attention

**Most important  
Symptoms/effects, and  
Special Treatment Needed:  
General Information:**

No further relevant information available

No further relevant information available

### 5. Fire-Fighting Measures

**Suitable Extinguishing Media:**

Water. Foam. Carbon dioxide. Fire-extinguishing powder.

**Unsuitable Extinguishing Media:  
Specific Hazards Arising from  
The Chemical:**

Water with full jet.

In case of fire, the following can be released: Carbon monoxide (CO).  
Monomer (CAS 502-44-3)

**Special Protective Equipment  
And Precautions for Firefighters:**

Firefighters should wear appropriate protective equipment and selfcontained Breathing apparatus (SCBA) with a full face piece operated in positive pressure mode

### 6. Accidental Release Measures

**Personal Precautions,  
Protective Equipment and  
Emergency Procedures:**

Wear safety glasses, gloves, protective clothing and rubber boots for hygienic reasons.

**Methods and materials for  
Containment and Cleaning up:**

Pick up mechanically. Clean the affected area carefully, suitable cleaners are Water.

**Environmental Precautions:**

Do not allow to enter sewers/surface or ground water.

## **7. Handling and Storage**

**Precautions for Safe Handling:**

Wear personal protective equipment according to section 8 if risk of exposure. Keep away from Heat and direct sunlight.

**Conditions for Safe Storage,  
Including any Incompatibilities:**

Store only in the original receptacle. Store in cool, dry conditions in well sealed receptacles.

## **8. Exposure Controls/Personal Protection**

**Control Parameters**

**Components with Limit Values that Require Monitoring:**

This product does not contain any relevant quantities of materials with Critical values that have to be monitored.

**OSHA –CA (Occupational Safety & Health Administration):**

Substance not listed

**US. ACGIH Threshold Limit Values**

Substance not listed

**US. NIOSH: Pocket Guide to Chemical Hazards**

Substance not listed

**Individual Protection Measures, Such as Personal Protective Equipment:**

**Eye/Face Protection:**

Safety glasses

**Body Protection:**

Normal work clothes for the chemical industry (long legs and sleeves)

**Hand Protection:**

Protective gloves not required. However, we recommend using protective gloves made of rubber.

**Respiratory Protection:**

Not necessary if room is well ventilated. Wear respiratory device with dust Filter (minimum N95) in case of insufficient ventilation.

**General Hygiene Consideration:**

The usual precautionary measures for handling chemicals should be followed

**Limitation and supervision of Exposure into the Environment:**

Not applicable

## 9. Physical and Chemical Properties

**Appearance****Form:**

Granulate

**Color:**

White, Pink, Yellow or Blue

**Odor:**

Odorless

**Melting Point/Melting Range**

136-140°F (58-60°C)

**Initial Boiling Point and****Boiling Range:**

Not determined

**Flash Point:**

527°F (275°C)

**Flammability (solid, gas):**

Not determined

**Ignition Temperature****Decomposition Temperature:**

392°F (200°C)

**Danger of Explosion:**

Not explosive.

**Explosion Limits:**

Not applicable

**Oxidizing Properties:**

Not oxidizing

**Vapor Pressure:**

Not determined

**Density at 140°F (60°C):**

1.1 g/cm<sup>3</sup> (9.18 lbs/gal)

**Solubility in /Miscibility with****Water:**

Insoluble.

**Segregation coefficient****(n-octanol/water):**

Not determined

**Viscosity Dynamic:**

Not applicable

**Other Information:**

No further relevant information available

## 10. Stability and Reactivity

**Reactivity:**

There exists no specific test data for this product. For further information, see the subsequent subsections of this chapter.

**Chemical Stability:**

This product is stable at normal conditions.

**Thermal Decomposition/  
Conditions to Avoid:  
Possibility of Hazardous  
Reactions:**

To avoid thermal decomposition do not overheat.

No dangerous reactions known.

**Conditions to Avoid:  
Incompatible Materials:**

Heat.

Avoid contact with acids. Avoid contact with bases

**Hazardous Decomposition Products:**

Possible decomposition and release of monomer at temperatures above 392°F (200°C).

## **11. Toxicological Information:**

### **Information on toxicological Effects**

**Acute Toxicity:**

**LD/LC50 Values:**

No Information available. The polymer is not bioavailable because of its molecular size.

**Skin Corrosion/Irritation:**

No information available.

**Serious Eye Damage/Eye**

**Irritation:**

No information available.

**Sensitization:**

No information available.

**Skin Sensitization:**

No information available.

**Carcinogenicity:**

No information available.

**Mutagenicity:**

No information available.

**Reproductive Toxicity:**

No information available.

**Remarks:**

Caution – substance not yet fully tested. Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

## **12. Ecological Information**

**Toxicity:**

**Aquatic Toxicity:**

No information available. Hydroplastic is not bioavailable because of its molecular size.

**Persistence and Degradability:**

No information available.

**Other Information:**

The product is readily biodegradable.

**Bioaccumulative Potential:**

No information available.

**Mobility in Soil:**

No information available.

**Results of PBT and vPvB Assessment**

**PBT:**

No

**vPvB:**

No

**Other Adverse Effects:**

No further information available.

**Remark:**

Caution – substance not yet fully tested. Due to the structure of the substance and studies made on similar products we assume that the product is unclassified.

## 13. Disposal Considerations

**Disposal Instructions:**

This product is not classified as hazardous waste.

**Local Disposal Regulations:**

Disposal must be made according to official regulations.

**Contaminated Packaging:**

Contaminated packaging materials must be disposed of in the same manner as the product.

**Recommended Cleansing Agent:**

Water, if necessary with cleansing agents.

## 14. Transport Information

**UN Number**

DOT, ADR, ADN, IMDG, IATA

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**Proper Shipping Name (Technical Name)**

DOT, ADR, ADR, IMDG, IATA

--

**Transport Hazard Class(es)**

DOT, ADR, ADN, IMDG, IATA

--

**Packing Group**

DOT, ADR, IMDG, IATA

--

**Environmental Hazards:**

Not Applicable.

**Special Precautions for User:**

Not Applicable.

**Transport in Bulk according to Annex II**

**Of MARPOL 73/78 and the IBC Code:** Not Applicable.

**Transport/Additional Information:**

Not dangerous according to the above specifications.

## 15. Regulatory Information

Sara

### Section 355

**(Extremely Hazardous substances):** Substance is not listed.

### Section 313

**(Specific Toxic Chemical Listings:** Substance is not listed.

### Carcinogenic Categories

#### EPA

**(Environmental Protection Agency):** Substance is not listed.

#### IARC (International Agency

**for the Research on Cancer):** Substance is not listed.

**NTP (National Toxicology Program):** Substance is not listed.

### Inventory Status

#### Australian Inventory of Chemical

**Substances (AICS):** Substance is listed.

#### Canadian Domestic Substance

**List (DSL)** Substance is listed.

#### Canadian Non Domestic

**Substance List (NDSL):** Substance is not listed.

#### Chinese Chemical Inventory of Existing

**Chemical Substances (CIECS):** Substance is listed.

#### European EINECS/ELINCS Listing

Substance is not listed.

#### Japan Existing and New Chemical

**Substance List (ENCS)** Substance is listed.

#### Korea Existing Chemical

**Inventory (KECI):** Substance is listed.

#### Philippines Inventory of Chemicals

**And Chemical Substances (PICCS):** Substance is listed.

**TSCA Listing:** Substance is listed.

### Other Regulations, Limitations, and Prohibitive Regulations

#### State of California, Proposition 65:

**Chemicals Known to Cause Cancer:** Substance is not listed.

#### Chemicals Known to Cause

**Reproductive Toxicity for Females:** Substance is not listed.



**Chemicals Known to Cause  
Reproductive Toxicity for Males:  
Chemicals Known to Cause  
Developmental Toxicity:**

Substance is not listed.

Substance is not listed.

## **16. Other Information, Including Date of Preparation or Last Revision**

**Issue Date:**

December 1, 2015

**Revision Date:**

Not applicable.

**Version #:**

1

**Further Information:**

**HMIS Ratings:**

Health = 1  
Fire = 1  
Reactivity -- 0

**NFPA Ratings:**

Health = 1  
Fire = 1  
Reactivity -- 0

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