

#### AstroFusion Pro 2k Part A

1	PRODUCT AND COMPANY IDENTIFICATION
---	------------------------------------

Product Identifier:	AstroFusion Pro 2k Part A		
Revision Date:	1/15/2018		
Supplier Details:	Advanced Polymer Technology P.O. Box 160 109 Conica Lane Harmony, PA 16037	Vendor Details:	AstroTurf 2680 Abutment Rd Dalton, GA 30721
Contact:	Senior Chemist	Phone:	800-723-8873
Phone:	724-452-1330		
Fax:	724-452-1703		
Email:	info@advpolytech.com		
Web:	www.advpolytech.com		

**Transportation emergency phone number:** ChemTel Inc. (800)255-3924, +1 (813)248-0585

2	HAZARDS IDENTIFICATION
---	------------------------

Classification of the Substance or Mixture

GHS Classification in Accordance with 29 CFR 1910 (OSHA HCS):  
No GHS Classifications Indicated

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **NONE**

No GHS pictograms indicated for this product

GHS Hazard Statements:

No GHS hazards statements indicated

GHS Precautionary Statements:

No GHS precautionary statements indicated

Hazards not Otherwise Classified (HNOC) or not Covered by GHS

**Classification according to Regulation (EC) No 1272/2008**

The product is not classified according to GHS regulations.  
The product is not classified according to the CLP regulation.

3	COMPOSITION/INFORMATION OF INGREDIENTS
---	--

Ingredients:

Cas#	%	Chemical Name
8001-79-4	25-50%	Castor oil
7727-43-7	10-25%	Barium sulfate
1317-65-3	10-25%	Calcium carbonate
25054-06-2	<10%	Formaldehyde, polymer with cyclohexanone
70775-94-9	<10%	Sulfonic acids, C10-18-alkane, Ph esters
1308-38-9	<10%	Chromium (III) oxide
770-35-4	<10%	2-Propanol, 1-phenoxy-
50-00-0	<0.1%	Formaldehyde

**General information:** No special measures required.

**After inhalation:** Supply fresh air; consult doctor in case of complaints.

**After skin contact:**

Clean with water and soap.

If skin irritation continues, consult a doctor.

**After eye contact:**

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing:**

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

**Most important symptoms and effects, both acute and delayed** Gastric or intestinal disorders

**Hazards** No further relevant information available.

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

Flash Point: >392 °F / >200 °C (DIN 51758)

Suitable extinguishing agents:

Foam

Fire-extinguishing powder

Gaseous extinguishing agents

Carbon dioxide

Water haze or fog

For safety reasons unsuitable extinguishing agents:

Water with full jet

Water spray

Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide (CO)

Under certain fire conditions, traces of other toxic gases cannot be excluded.

Advice for firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information

Cool endangered receptacles with water fog or haze.

No further relevant information available.

Wear protective clothing.  
Ensure adequate ventilation

**Environmental precautions:** No special measures required.

**Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Send for recovery or disposal in suitable receptacles.

**Reference to other sections**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

Handling Precautions: No special precautions are necessary if used correctly.

Storage Requirements: Information about fire - and explosion protection: No special measures required.  
Requirements to be met by storerooms and receptacles:  
Avoid storage near extreme heat, ignition sources or open flame.  
Store in a cool location.

Information about storage in one common storage facility:  
Store away from foodstuffs.  
Do not store together with oxidizing and acidic materials.

Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.

Engineering Controls:	Educate and train employees in safe use of this product. Follow all label instruction. Local exhaust should be used to maintain levels below the TLV whenever this product is processed, heated or spray applied. For spray applications, an air-supplied respirator must be worn. All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94).
Personal Protective Equipment:	<p>General protective and hygienic measures:          The usual precautionary measures are to be adhered to when handling chemicals.          Keep away from foodstuffs, beverages and feed.          Immediately remove all soiled and contaminated clothing          Wash hands before breaks and at the end of work.          Avoid contact with the eyes.</p> <p>Respiratory protection: Not required under normal conditions of use.</p> <p>Protection of hands:          Protective gloves          The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.          Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation          Material of gloves          The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.          Penetration time of glove material          The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.          For the permanent contact gloves made of the following materials are suitable: Rubber gloves</p> <p>Eye protection:          Safety glasses</p> <p>Body protection:          Not required under normal conditions of use.          Protection may be required for spills.</p> <p>Limitation and supervision of exposure into the environment          No further relevant information available.</p> <p>Risk management measures          See Section 7 for additional information.          No further relevant information available.</p>

**Ingredients with limit values that require monitoring at the workplace:**

**7727-43-7 barium sulphate, natural**

PEL (USA) 15\* 5\*\* mg/m<sup>3</sup> \*total dust \*\*respirable fraction

REL (USA) 10\* 5\*\* mg/m<sup>3</sup> \*total dust \*\*respirable fraction

TLV (USA) 10 mg/m<sup>3</sup>

EL (Canada) 10 mg/m<sup>3</sup>

EV (Canada) 10 mg/m<sup>3</sup> total dust

**1308-38-9 dichromium trioxide**

IOELV (EU) 2 mg/m<sup>3</sup> as Cr

REL (USA) 0,5 mg/m<sup>3</sup> as Cr

TLV (USA) 0,5 mg/m<sup>3</sup> as Cr

EL (Canada) 0,5 mg/m<sup>3</sup> as Cr

**DNELs** No further relevant information available.

**PNECs** No further relevant information available.

**Additional information:** The lists valid during the making were used as basis.

9	PHYSICAL AND CHEMICAL PROPERTIES
---	----------------------------------

Appearance:	Clear Liquid		
Physical State:	Liquid	Flash Point:	>392 °F / >200 °C (DIN 51758)
Spec Grav./Density:	1,3 g/cm <sup>3</sup>	VOC:	0 g/L

10	STABILITY AND REACTIVITY
----	--------------------------

Chemical Stability:	No decomposition if used and stored according to specifications.
Conditions to Avoid:	Store away from oxidizing agents.
Materials to Avoid:	Reacts with strong oxidizing agents. Reacts with strong acids and alkali.
Hazardous Decomposition:	Hydrocarbons Carbon monoxide and carbon dioxide
Hazardous Polymerization:	Will not occur.

11	TOXICOLOGICAL INFORMATION
----	---------------------------

**Acute toxicity:****Primary irritant effect:****on the skin:** Slight irritant effect on skin and mucous membranes.**on the eye:** Slight irritant effect on eyes.**Sensitization:** No sensitizing effects known.**Additional toxicological information:**

The product is not subject to classification according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12	ECOLOGICAL INFORMATION
----	------------------------

**Aquatic toxicity:** No further relevant information available.**Persistence and degradability** The product is partially biodegradable. Significant residuals remain.**Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:**

This statement was deduced from products with a similar structure or composition.

Due to available data on eliminability/decomposition and bioaccumulation potential a prolonged damage of the environment is unlikely.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.  
Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

<b>UN-Number DOT, ADR, ADN, IMDG, IATA</b>	N/A
<b>UN proper shipping name DOT, ADR, ADN, IMDG, IATA</b>	N/A
<b>Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA Class</b>	N/A
<b>Packing group DOT, ADR, IMDG, IATA</b>	N/A
<b>Marine pollutant</b>	No
<b>Special precautions for user</b>	Not applicable.
<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
<b>UN "Model Regulation"</b>	---

COMPONENT / (CAS/PERC) / CODES

-----

\*Castor oil (8001794 25-50%) TSCA

\*Barium sulfate (7727437 10-25%) MASS, OSHAWAC, PA, TSCA, TXAIR

\*Calcium carbonate (1317653 10-25%) MASS, OSHAWAC, PA, TSCA, TXAIR

\*Formaldehyde, polymer with cyclohexanone (25054062 <10%) TSCA

\*Sulfonic acids, C10-18-alkane, Ph esters (70775949 <10%) TSCA

\*Chromium (III) oxide (1308389 <10%) MASS, TSCA

\*2-Propanol, 1-phenoxy- (770354 <10%) TSCA

\*Formaldehyde (50000 <0.1%) CERCLA, CSWHS, EHS302, EPCRAWPC, HAP, MASS, NJEHS, NJHS, NRC, OSHAHTS, OSHAPSM, PA, PROP65, SARA313, TOXICRCRA, TSCA, TXAIR, TXHWL

REGULATORY KEY DESCRIPTIONS

-----

TSCA = Toxic Substances Control Act

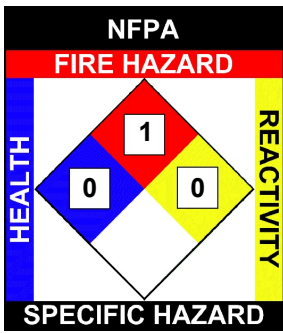
MASS = MA Massachusetts Hazardous Substances List  
OSHAHAC = OSHA Workplace Air Contaminants  
PA = PA Right-To-Know List of Hazardous Substances  
TXAIR = TX Air Contaminants with Health Effects Screening Level

CERCLA = Superfund clean up substance  
CSWHS = Clean Water Act Hazardous substances  
EHS302 = Extremely Hazardous Substance  
EPCRAWPC = EPCRA Water Priority Chemicals  
HAP = Hazardous Air Pollutants  
NJEHS = NJ Extraordinarily Hazardous Substances  
NJHS = NJ Right-to-Know Hazardous Substances  
NRC = Nationally Recognized Carcinogens  
OSHAHTS = OSHA Hazardous and Toxic Substances  
OSHAPSM = OSHA Chemicals Requiring process safety management  
PROP65 = CA Prop 65  
SARA313 = SARA 313 Title III Toxic Chemicals  
TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List)  
TXHWL = TX Hazardous Waste List

NFPA: Health = 0, Fire = 1, Reactivity = 0, Specific Hazard = n/a

HMIS Health = 0, Fire = 1, Physical Hazard = 0

III:



HMIS	
HEALTH	<input type="checkbox"/> 0
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	<input type="checkbox"/>

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.