

## Safety Data Sheet acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

### 1 Identification

- **Product identifier**
- **Trade name:** *APF 7 Gray*
- **Article number:** *I011041*
- **Application of the substance / the mixture** *Polyester resin*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
*Company Name: Axson Technologies*

*Headquarters:  
31200 Stephenson Hwy  
Madison Heights, MI 48071  
USA*

*ehs-us@axson.com*

- **Information department:** *Product safety department*
- **Emergency telephone number:**  
*During normal opening times: +1(248) 588-2270  
Chemtec 24-hour Emergency: +1 (800) 424-9300*

### 2 Hazard(s) identification

- **Classification of the substance or mixture**



*GHS02 Flame*

*Flam. Liq. 3                      H226 Flammable liquid and vapor.*



*GHS08 Health hazard*

*Carc. 1A                      H350 May cause cancer.*



*GHS07*

*Eye Irrit. 2A                      H319 Causes serious eye irritation.*

*STOT SE 3                      H335 May cause respiratory irritation.*

*Aquatic Chronic 3                      H412 Harmful to aquatic life with long lasting effects.*

- **Label elements**
- **GHS label elements** *The product is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms**



*GHS02*



*GHS07*



*GHS08*

## Safety Data Sheet acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 1)

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>)*

*titanium dioxide*

*Vinyl toluene*

*ethanol*

· **Hazard statements**

*Flammable liquid and vapor.*

*Causes serious eye irritation.*

*May cause cancer.*

*May cause respiratory irritation.*

*Harmful to aquatic life with long lasting effects.*

· **Precautionary statements**

*Keep away from heat/sparks/open flames/hot surfaces. No smoking.*

*Use explosion-proof electrical/ventilating/lighting/equipment.*

*Avoid breathing dust/fume/gas/mist/vapors/spray*

*Wear protective gloves / eye protection / face protection.*

*Ground/bond container and receiving equipment.*

*Use only non-sparking tools.*

*Avoid release to the environment.*

*Take precautionary measures against static discharge.*

*Wash thoroughly after handling.*

*Use only outdoors or in a well-ventilated area.*

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*

*Continue rinsing.*

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

*Call a POISON CENTER/doctor if you feel unwell.*

*IF exposed or concerned: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

*Store locked up.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Store in a well-ventilated place. Keep cool.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



*Health = 1*

*Fire = 2*

*Reactivity = 0*

· **HMIS-ratings (scale 0 - 4)**



*Health = 1*

*Fire = 2*

*Reactivity = 0*

(Contd. on page 3)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 2)

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**3 Composition/information on ingredients**

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

|                                      |                                                                         |         |
|--------------------------------------|-------------------------------------------------------------------------|---------|
| CAS: 14807-96-6<br>EINECS: 238-877-9 | Talc (Mg <sub>3</sub> H <sub>2</sub> (SiO <sub>3</sub> ) <sub>4</sub> ) | 25-50%  |
| CAS: 25013-15-4<br>EINECS: 246-562-2 | Vinyl toluene                                                           | 10-<20% |
| CAS: 13463-67-7<br>EINECS: 236-675-5 | titanium dioxide                                                        | 1 - 5%  |
| CAS: 64-17-5<br>EINECS: 200-578-6    | ethanol                                                                 | 0.1-1%  |

**4 First-aid measures**

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately rinse with water.
- **After eye contact:**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

**5 Fire-fighting measures**

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

US

(Contd. on page 4)

## Safety Data Sheet acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 3)

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Prevent seepage into sewage system, workpits and cellars.  
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **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.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**

· **Components with limit values that require monitoring at the workplace:**

**25013-15-4 Vinyl toluene**

|     |                                                                                                      |
|-----|------------------------------------------------------------------------------------------------------|
| PEL | Long-term value: 480 mg/m <sup>3</sup> , 100 ppm                                                     |
| REL | Long-term value: 480 mg/m <sup>3</sup> , 100 ppm                                                     |
| TLV | Short-term value: 483 mg/m <sup>3</sup> , 100 ppm<br>Long-term value: 242 mg/m <sup>3</sup> , 50 ppm |

- **Additional information:** The lists that were valid during the creation were used as basis.

(Contd. on page 5)

## Safety Data Sheet acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 4)

- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
 Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.
- **Breathing equipment:**  
 In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **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.
- **Eye protection:**



Tightly sealed goggles

### 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

|        |                |
|--------|----------------|
| Form:  | Highly viscous |
| Color: | Grey           |
- **Odor:** Pungent
- **Odour threshold:** Not determined.
- **pH-value:** Not determined.
- **Change in condition**

|                              |               |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
|------------------------------|---------------|

(Contd. on page 6)

## Safety Data Sheet acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 5)

|                                                   |                                                                                            |
|---------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>Boiling point/Boiling range:</b>               | 999 °C (1830 °F)                                                                           |
| · <b>Flash point:</b>                             | 53 °C (127 °F)                                                                             |
| · <b>Flammability (solid, gaseous):</b>           | Not applicable.                                                                            |
| · <b>Ignition temperature:</b>                    |                                                                                            |
| <b>Decomposition temperature:</b>                 | Not determined.                                                                            |
| · <b>Auto igniting:</b>                           | Product is not selfigniting.                                                               |
| · <b>Danger of explosion:</b>                     | Product is not explosive. However, formation of explosive air/vapor mixtures are possible. |
| · <b>Explosion limits:</b>                        |                                                                                            |
| <b>Lower:</b>                                     | Not determined.                                                                            |
| <b>Upper:</b>                                     | Not determined.                                                                            |
| · <b>Vapor pressure:</b>                          | Not determined.                                                                            |
| · <b>Density at 20 °C (68 °F):</b>                | 2.12898 g/cm <sup>3</sup> (17.766 lbs/gal)                                                 |
| · <b>Relative density</b>                         | Not determined.                                                                            |
| · <b>Vapour density</b>                           | Not determined.                                                                            |
| · <b>Evaporation rate</b>                         | Not determined.                                                                            |
| · <b>Solubility in / Miscibility with Water:</b>  | Not miscible or difficult to mix.                                                          |
| · <b>Partition coefficient (n-octanol/water):</b> | Not determined.                                                                            |
| · <b>Viscosity:</b>                               |                                                                                            |
| <b>Dynamic:</b>                                   | Not determined.                                                                            |
| <b>Kinematic:</b>                                 | Not determined.                                                                            |
| · <b>Solvent content:</b>                         |                                                                                            |
| <b>Organic solvents:</b>                          | 14.4 %                                                                                     |
| <b>VOC content:</b>                               | 14.4 %                                                                                     |
|                                                   | 307.1 g/l / 2.56 lb/gl                                                                     |
| <b>Solids content:</b>                            | 60.4 %                                                                                     |
| · <b>Other information</b>                        | No further relevant information available.                                                 |

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

(Contd. on page 7)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

Trade name: APF 7 Gray

(Contd. of page 6)

**11 Toxicological information**

- **Information on toxicological effects**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

|            |          |                     |
|------------|----------|---------------------|
| Oral       | LD50     | 4000 mg/kg (rat)    |
| Dermal     | LD50     | 4500 mg/kg (rabbit) |
| Inhalative | LC50/4 h | 3000 mg/l (mouse)   |

- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

|            |                              |    |
|------------|------------------------------|----|
| 14807-96-6 | Talc (Mg3H2(SiO3)4)          | 2B |
| 25013-15-4 | Vinyl toluene                | 3  |
| 13463-67-7 | titanium dioxide             | 2B |
| 64-17-5    | ethanol                      | 1  |
| 69012-64-2 | Silica-Amorphous Silica fume | 3  |
| 108-10-1   | 4-methylpentan-2-one         | 2B |

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Harmful to fish
- **Additional ecological information:**
- **General notes:** Harmful to aquatic organisms
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

(Contd. on page 8)

**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**



· **Other adverse effects** No further relevant information available.

(Contd. of page 7)

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- **UN-Number**
- **DOT, IMDG, IATA** UN1866
- **UN proper shipping name**
- **DOT** Resin solution
- **IMDG, IATA** RESIN SOLUTION
- **Transport hazard class(es)**
- **DOT**
- 
- **Class** 3 Flammable liquids
- **Label** 3
- 
- **IMDG, IATA**
- 
- **Class** 3 Flammable liquids
- **Label** 3
- **Packing group**
- **DOT, IMDG, IATA** III
- **Environmental hazards:**
- **Marine pollutant:** No
- **Special precautions for user** Warning: Flammable liquids
- **Danger code (Kemler):** 39
- **EMS Number:** F-E,S-E
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

(Contd. on page 9)



## Safety Data Sheet acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 8)

**· Transport/Additional information:**

**· DOT**

**· Quantity limitations**

On passenger aircraft/rail: 60 L  
On cargo aircraft only: 220 L

**· IMDG**

**· Limited quantities (LQ)**

5L

**· Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

**· UN "Model Regulation":**

UN 1866 RESIN SOLUTION, 3, III, (D/E)

### 15 Regulatory information

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

**· Sara**

**· Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

**· Section 313 (Specific toxic chemical listings):**

|          |                      |
|----------|----------------------|
| 108-10-1 | 4-methylpentan-2-one |
|----------|----------------------|

**· Proposition 65**

**· Chemicals known to cause cancer:**

|            |                  |
|------------|------------------|
| 13463-67-7 | titanium dioxide |
|------------|------------------|

|          |                      |
|----------|----------------------|
| 108-10-1 | 4-methylpentan-2-one |
|----------|----------------------|

**· Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

**· Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

**· Chemicals known to cause developmental toxicity:**

|         |         |
|---------|---------|
| 64-17-5 | ethanol |
|---------|---------|

|          |                      |
|----------|----------------------|
| 108-10-1 | 4-methylpentan-2-one |
|----------|----------------------|

**· Carcinogenic categories**

**· EPA (Environmental Protection Agency)**

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

D, CBD(inh), NL(oral)

|          |                      |  |  |
|----------|----------------------|--|--|
| 108-10-1 | 4-methylpentan-2-one |  |  |
|----------|----------------------|--|--|

I

|          |         |  |  |
|----------|---------|--|--|
| 142-82-5 | heptane |  |  |
|----------|---------|--|--|

D

**· TLV (Threshold Limit Value established by ACGIH)**

|            |                     |  |  |
|------------|---------------------|--|--|
| 14807-96-6 | Talc (Mg3H2(SiO3)4) |  |  |
|------------|---------------------|--|--|

A4

|            |               |  |  |
|------------|---------------|--|--|
| 25013-15-4 | Vinyl toluene |  |  |
|------------|---------------|--|--|

A4

|            |                  |  |  |
|------------|------------------|--|--|
| 13463-67-7 | titanium dioxide |  |  |
|------------|------------------|--|--|

A4

|         |         |  |  |
|---------|---------|--|--|
| 64-17-5 | ethanol |  |  |
|---------|---------|--|--|

A3

(Contd. on page 10)

## Safety Data Sheet acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 9)

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

13463-67-7 titanium dioxide

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02   GHS07   GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labeling:**

*Talc (Mg<sub>3</sub>H<sub>2</sub>(SiO<sub>3</sub>)<sub>4</sub>)*

*titanium dioxide*

*Vinyl toluene*

*ethanol*

· **Hazard statements**

*Flammable liquid and vapor.*

*Causes serious eye irritation.*

*May cause cancer.*

*May cause respiratory irritation.*

*Harmful to aquatic life with long lasting effects.*

· **Precautionary statements**

*Keep away from heat/sparks/open flames/hot surfaces. No smoking.*

*Use explosion-proof electrical/ventilating/lighting/equipment.*

*Avoid breathing dust/fume/gas/mist/vapors/spray*

*Wear protective gloves / eye protection / face protection.*

*Ground/bond container and receiving equipment.*

*Use only non-sparking tools.*

*Avoid release to the environment.*

*Take precautionary measures against static discharge.*

*Wash thoroughly after handling.*

*Use only outdoors or in a well-ventilated area.*

*Obtain special instructions before use.*

*Do not handle until all safety precautions have been read and understood.*

*If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*

*Call a POISON CENTER/doctor if you feel unwell.*

*IF exposed or concerned: Get medical advice/attention.*

*If eye irritation persists: Get medical advice/attention.*

*In case of fire: Use for extinction: CO<sub>2</sub>, powder or water spray.*

*Store locked up.*

*Store in a well-ventilated place. Keep container tightly closed.*

*Store in a well-ventilated place. Keep cool.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

(Contd. on page 11)

## Safety Data Sheet

acc. to OSHA HCS

Printing date 09/17/2015

Reviewed on 09/17/2015

**Trade name: APF 7 Gray**

(Contd. of page 10)

- **National regulations:**
- **Additional classification according to Decree on Hazardous Materials:**  
*Carcinogenic hazardous material group III (dangerous).*
- **Information about limitation of use:**  
*Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.  
Exceptions can be made by the authorities in certain cases.*
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

### 16 Other information

*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.*

- **Date of preparation / last revision** 09/17/2015 / 9
- **Abbreviations and acronyms:**  
*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*  
*IMDG: International Maritime Code for Dangerous Goods*  
*DOT: US Department of Transportation*  
*IATA: International Air Transport Association*  
*ACGIH: American Conference of Governmental Industrial Hygienists*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*ELINCS: European List of Notified Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*  
*VOC: Volatile Organic Compounds (USA, EU)*  
*LC50: Lethal concentration, 50 percent*  
*LD50: Lethal dose, 50 percent*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*  
*Flam. Liq. 3: Flammable liquids, Hazard Category 3*  
*Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A*  
*Carc. 1A: Carcinogenicity, Hazard Category 1A*  
*STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3*  
*Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3*

US