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1 Identification

- · Product identifier
- · Trade name: APF7 Black
- · Article number: 1011035
- · 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 Fl	lame
Flam. Liq. 3 H	1226 Flammable liquid and vapor.
GHS08 He	ealth hazard
Carc. 1A E	1350 May cause cancer.
GHS07	
Eye Irrit. 2A H	H319 Causes serious eye irritation.
STOT SE 3 H	1335 May cause respiratory irritation.
Aquatic Chronic 3 H	1412 Harmful to aquatic life with long lasting effects.
· Hazard pictograms	The product is classified and labeled according to the Globally Harmonized System (GHS).
GHS02 GHS07	GHS08
• Signal word Danger	(Contd. on page 2) US

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Hazard-determining components of labeling:
Talc (Mg3H2(SiO3)4)
ethanol
Vinyl toluene
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: CO2, 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
O Reactivity = 0
HMIS-ratings (scale 0 - 4)
HEALTH 1 $Health = 1$
FIRE 2 $Fire = 2$
REACTIVITY 0 Reactivity = 0
Reactivity = 0
Other hazards
Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.

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3 Composition/information on ingredients

· Chemical characterization: Mixtures

· Description: Mixture of the substances listed below with nonhazardous additions.

· Dangerous compone	· Dangerous components:		
CAS: 14807-96-6 EINECS: 238-877-9	Talc (Mg3H2(SiO3)4)	25-50%	
CAS: 25013-15-4 EINECS: 246-562-2	Vinyl toluene	10-<20%	
CAS: 64-17-5 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:
- CO2, 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.

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.

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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/m³, 100 ppm

- *REL* Long-term value: 480 mg/m³, 100 ppm
- TLV Short-term value: 483 mg/m³, 100 ppm
- Long-term value: 242 mg/m³, 50 ppm

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

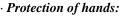
· Exposure controls

- · 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.





Protective gloves

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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 \cdot *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

General Information Appearance:	
· Appearance: Form:	Highly viscous
Color:	Black
· Odor:	Pungent
· Odour threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	999 °C (1830 °F)
· Flash point:	53 °C (127 °F)
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	
Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
· Vapor pressure:	Not determined.
• Density at 20 •C (68 •F):	2.0671 g/cm ³ (17.25 lbs/gal)
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.

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Solubility in / Miscibility with Water:	Not miscible or difficult to mix.	
	**	
· Partition coefficient (n-octanol/	water): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	14.6 %	
VOC content:	14.6 %	
	300.9 g/l / 2.51 lb/gl	
Solids content:	59.9 %	
• Other information	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.

11 Toxicological information

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

Oral	LD50	4000 mg/kg (rat)
Dermal		4500 mg/kg (rabbit)
Inhalative		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

ſ	· IARC (Inter	national Agency for Research on Cancer)	
	14807-96-6	Talc (Mg3H2(SiO3)4)	2B
	25013-15-4	Vinyl toluene	3
	64-17-5	ethanol	1
	108-10-1	4-methylpentan-2-one	2B
		(Contd	. on page 7)

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- · 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.
- · Ecotoxical 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.
- · Other adverse effects No further relevant information available.

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.

UN-Number		
DOT, IMDG, IATA	UN1866	
UN proper shipping name		
DOT	Resin solution	
IMDG, IATA	RESIN SOLUTION	
Transport hazard class(es)		
DOT		
PLANMARE LOUID		
Class	3 Flammable liquids	

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	(Contd.	of page
Label	3	
IMDG, IATA		
Class	3 Flammable liquids	
Label	3	
Packing group		
DOT, IMDG, IATA	111	
Environmental hazards:		
Marine pollutant:	No	
Special precautions for user	Warning: Flammable liquids	
EMS Number:	<i>F-E</i> , <u><i>S-E</i></u>	
Transport in bulk according to Annex	II of	
MARPOL73/78 and the IBC Code	Not applicable.	
Transport/Additional information:		
DOT		
Quantity limitations	On passenger aircraft/rail: 60 L	
	On cargo aircraft only: 220 L	
UN "Model Regulation":	UN 1866 RESIN SOLUTION, 3, III	

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot 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:

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

 \cdot EPA (Environmental Protection Agency)

7727-43-7 barium sulphate, natural

D, CBD(inh), NL(oral)

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108-10-1 4-methylpentan-2-one I	(Contd. of page
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	
64-17-5 ethanol	A.
	л.
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients is listed.	
GHS label elements The product is classified and labeled according to the Globally Harmonized Sy Hazard pictograms	vstem (GHS).
GHS02 GHS07 GHS08	
Signal word Danger	
Hazard-determining components of labeling:	
Talc (Mg3H2(SiO3)4)	
ethanol	
Vinyl toluene Hazard statements	
Flammable liquid and vapor. Causes serious eye irritation.	
May cause cancer.	
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 as	nd easy to a
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: CO2 powder or water spray	
In case of fire: Use for extinction: CO2, powder or water spray.	
In case of fire: Use for extinction: CO2, powder or water spray. Store locked up.	
In case of fire: Use for extinction: CO2, powder or water spray.	

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

· 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 09/15/2015 / 8

· 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