

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

1 Identification

- **Product identifier**
- **Trade name:** APF4 Gray
- **Article number:** I011005
- **Application of the substance / the mixture** Polyester filler
- **Details of the supplier of the safety data sheet**
Sika Advanced Resins, US
EHS Department
- **Manufacturer/Supplier:**
Supplier's Name: Sika Advanced Resins, US
Headquarters:
30800 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
CHEMTREC 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.

Water-react. 1 H260 In contact with water releases flammable gases, which may ignite spontaneously.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

Repr. 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 1 H372 Causes damage to the hearing organs through prolonged or repeated exposure.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

(Contd. on page 2)

US

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: *APF4 Gray*

(Contd. of page 1)

· **Label elements**· **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:***Styrene*· **Hazard statements***Flammable liquid and vapor.**In contact with water releases flammable gases, which may ignite spontaneously.**Causes skin irritation.**Causes serious eye irritation.**Suspected of causing cancer.**Suspected of damaging fertility or the unborn child.**Causes damage to the hearing organs through prolonged or repeated exposure.*· **Precautionary statements***Avoid breathing dust/fume/gas/mist/vapors/spray**Keep away from heat/sparks/open flames/hot surfaces. - No smoking.**Do not allow contact with water.**Handle under inert gas. Protect from moisture.**Use explosion-proof electrical/ventilating/lighting/equipment.**Do not breathe dust/fume/gas/mist/vapors/spray.**Wear protective gloves/protective clothing/eye protection/face protection.**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.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Classification system:**· **NFPA ratings (scale 0 - 4)**

Health = 2

Fire = 2

Reactivity = 2

The substance demonstrates unusual reactivity with water.

(Contd. on page 3)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: **APF4 Gray**

(Contd. of page 2)

· **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	2	Fire = 2
REACTIVITY	2	Reactivity = 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: 100-42-5	Styrene	10-20%
EINECS: 202-851-5		
CAS: 91-99-6	N,N-Bishydroxyethyl-m-toluidine	0.1-1%

4 First-aid measures

- **Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **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:**
Extinguishing powder. Do not use water.
CO₂. Do not use water.

(Contd. on page 4)



Safety Data Sheet
acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: APF4 Gray

(Contd. of page 3)

- Sand. Do not use water.*
- Special powder for metal fires. Do not use water.*
- CO2, sand, extinguishing powder. Do not use water.*
- **For safety reasons unsuitable extinguishing agents:** *Water*
- **Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:**
Mouth respiratory protective device.
Wear self-contained respiratory protective device.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **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.
Do not flush with water or aqueous cleansing agents
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

100-42-5	Styrene	20 ppm
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· **PAC-2:**

100-42-5	Styrene	130 ppm
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· **PAC-3:**

100-42-5	Styrene	1100* ppm
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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.

(Contd. on page 5)



Safety Data Sheet
acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: APF4 Gray

(Contd. of page 4)

- **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.
Store in cool, dry conditions in well sealed receptacles.
- **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:**
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

100-42-5 Styrene

ACGIH TLV	Short-term value: 170 at 40 ppm mg/m ³ Long-term value: 85 at 20 ppm mg/m ³
OSHA PEL	Long-term value: 100 ppm mg/m ³ Ceiling limit value: 200 ppm mg/m ³
PEL	Long-term value: 100 ppm Ceiling limit value: 200; 600* ppm *5-min peak in any 3 hrs
REL	Short-term value: 425 mg/m ³ , 100 ppm Long-term value: 215 mg/m ³ , 50 ppm
TLV	Short-term value: (170) mg/m ³ , (40) NIC-20 ppm Long-term value: (85) mg/m ³ , (20) NIC-10 ppm BEI, NIC-A3, NIC-OTO

- **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.

(Contd. on page 6)

Safety Data Sheet
acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: APF4 Gray

(Contd. of page 5)

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:	Pasty
· Color:	Grey
· Odor:	Pungent
· Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	145 °C (293 °F)

· **Flash point:** 31 °C (87.8 °F)

· **Flammability (solid, gaseous):** Not applicable.

(Contd. on page 7)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: APF4 Gray

(Contd. of page 6)

· Ignition temperature:	490 °C (914 °F)
· 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:	0.9 Vol %
Upper:	6.8 Vol %
· Vapor pressure at 20 °C (68 °F):	6 hPa (4.5 mm Hg)
· Density at 20 °C (68 °F):	2.13 g/cm ³ (17.77 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not determined.
· 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:	0.3 %
Water:	0.0 %
VOC content:	15.28 %
	325.5 g/l / 2.72 lb/gal
· Solids content:	55.7 %
· 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** Contact with water releases flammable gases.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** Carbon monoxide and carbon dioxide

(Contd. on page 8)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: APF4 Gray

(Contd. of page 7)

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:

- LD/LC50 values that are relevant for classification:

100-42-5 Styrene

Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
Inhalative	LC50/4 h	11.8 mg/l (rat)

- Primary irritant effect:
 - on the skin: Irritant to skin and mucous membranes.
 - 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)	3
100-42-5	Styrene	2B
13463-67-7	titanium dioxide	2B
64-17-5	ethanol	1

- 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.
- Additional ecological information:
- General notes:
 - Water hazard class 2 (Self-assessment): hazardous for water
 - Do not allow product to reach ground water, water course or sewage system.
 - Danger to drinking water if even small quantities leak into the ground.

(Contd. on page 9)

Safety Data Sheet
acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: **APF4 Gray**

(Contd. of page 8)

- **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.

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

(Contd. on page 10)



Safety Data Sheet
acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: APF4 Gray

(Contd. of page 9)

· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Flammable liquids
· EMS Number:	F-E, <u>S-E</u>
· Stowage Category	A
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· UN "Model Regulation":	UN 1866 RESIN SOLUTION, 3

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):	100-42-5	Styrene
· TSCA (Toxic Substances Control Act):	All components have the value ACTIVE.	
· Chemicals regulated by TSCA Section 12(b)	None of the ingredients is listed.	
· Chemical regulated by TSCA 5(a)(2)rule:	None of the ingredients is listed.	
· Hazardous Air Pollutants	100-42-5	Styrene
	108-10-1	4-methylpentan-2-one
· Proposition 65		
· Chemicals known to cause cancer:	100-42-5	Styrene
	13463-67-7	titanium dioxide
	14808-60-7	Quartz (SiO ₂)
	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.	

(Contd. on page 11)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: *APF4 Gray*

(Contd. of page 10)

· Chemicals known to cause developmental toxicity:	
64-17-5	ethanol
108-10-1	4-methylpentan-2-one

· Carcinogenic categories	
· NIOSH-Ca (National Institute for Occupational Safety and Health)	
13463-67-7	titanium dioxide

· Listed in CWC Regulations	
None of the ingredients is listed.	

· **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:**

Styrene

· **Hazard statements**

Flammable liquid and vapor.

In contact with water releases flammable gases, which may ignite spontaneously.

Causes skin irritation.

Causes serious eye irritation.

Suspected of causing cancer.

Suspected of damaging fertility or the unborn child.

Causes damage to the hearing organs through prolonged or repeated exposure.

· **Precautionary statements**

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

Do not allow contact with water.

Handle under inert gas. Protect from moisture.

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

Do not breathe dust/fume/gas/mist/vapors/spray.

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

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.

Store locked up.

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

· **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

US

(Contd. on page 12)

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/07/2019

Reviewed on 12/07/2019

Trade name: APF4 Gray

(Contd. of page 11)

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** 12/07/2019 / 9

· **Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 3: Flammable liquids – Category 3

Water-react. 1: Substances and mixtures which in contact with water emit flammable gases – Category 1

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1

· *** Data compared to the previous version altered.**