



BUILDING TRUST



Safety Data Sheet

acc. to OSHA HCS

Printing date 05/29/2018

Reviewed on 03/10/2018

1 Identification

- **Product identifier**
- **Trade name:** P 15-3 Reducer Resin
- **Article number:** 1015188
- **Application of the substance / the mixture** Polyester resin
- **Details of the supplier of the safety data sheet** SikaAxson US - EHS Department
- **Manufacturer/Supplier:**
Company Name: Axson Technologies US, Inc.-SikaAxson

Headquarters:
31200 Stephenson Hwy
Madison Heights, MI 48071
USA

Manufacturing Site:
1611 Hults Drive
Eaton Rapids, MI 48827
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.



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2A H319 Causes serious eye irritation.

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

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· Hazard pictograms



GHS02 GHS07 GHS08

· Signal word *Warning*

· Hazard-determining components of labeling:

Styrene
triethyl phosphate
antimony trioxide

· Hazard statements

Flammable liquid and vapor.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.

· Precautionary statements

Avoid breathing dust/fume/gas/mist/vapors/spray
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
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 in a well-ventilated place. Keep cool.
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 = 3
Reactivity = 0

· HMIS-ratings (scale 0 - 4)



HEALTH 2 Health = 2
FIRE 3 Fire = 3
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 components:**

| | | |
|-------------------------------------|--------------------|--------|
| CAS: 100-42-5 EINECS: 202-851-5 | Styrene | 20-50% |
| CAS: 1309-64-4 EINECS: 215-175-0 | antimony trioxide | 1-5% |
| CAS: 78-40-0 EINECS: 201-114-5 | triethyl phosphate | 1-5% |

4 First-aid measures

- **Description of first aid measures**
- **General information:**
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:** Immediately call a 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:** 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**
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).

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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.

· **Protective Action Criteria for Chemicals**

· **PAC-1:**

| | | |
|------------|--------------------------------------|------------------------|
| 100-42-5 | Styrene | 20 ppm |
| 13463-67-7 | titanium dioxide | 30 mg/m ³ |
| 1309-64-4 | antimony trioxide | 1.8 mg/m ³ |
| 78-40-0 | triethyl phosphate | 23 mg/m ³ |
| 756-79-6 | dimethyl methylphosphonate | 10 mg/m ³ |
| 64-17-5 | ethanol | 1,800 ppm |
| 21645-51-2 | aluminium hydroxide | 8.7 mg/m ³ |
| 7631-86-9 | silicon dioxide, chemically prepared | 18 mg/m ³ |
| 7440-38-2 | arsenic | 1.5 mg/m ³ |
| 7439-92-1 | lead | 0.15 mg/m ³ |

· **PAC-2:**

| | | |
|------------|--------------------------------------|-----------------------|
| 100-42-5 | Styrene | 130 ppm |
| 13463-67-7 | titanium dioxide | 330 mg/m ³ |
| 1309-64-4 | antimony trioxide | 16 mg/m ³ |
| 78-40-0 | triethyl phosphate | 250 mg/m ³ |
| 756-79-6 | dimethyl methylphosphonate | 110 mg/m ³ |
| 64-17-5 | ethanol | 3300* ppm |
| 21645-51-2 | aluminium hydroxide | 73 mg/m ³ |
| 7631-86-9 | silicon dioxide, chemically prepared | 740 mg/m ³ |
| 7440-38-2 | arsenic | 17 mg/m ³ |
| 7439-92-1 | lead | 120 mg/m ³ |

· **PAC-3:**

| | | |
|------------|--------------------------------------|-------------------------|
| 100-42-5 | Styrene | 1100* ppm |
| 13463-67-7 | titanium dioxide | 2,000 mg/m ³ |
| 1309-64-4 | antimony trioxide | 96 mg/m ³ |
| 78-40-0 | triethyl phosphate | 320 mg/m ³ |
| 756-79-6 | dimethyl methylphosphonate | 1,600 mg/m ³ |
| 64-17-5 | ethanol | 15000* ppm |
| 21645-51-2 | aluminium hydroxide | 440 mg/m ³ |
| 7631-86-9 | silicon dioxide, chemically prepared | 4,500 mg/m ³ |
| 7440-38-2 | arsenic | 100 mg/m ³ |
| 7439-92-1 | lead | 700 mg/m ³ |

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7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
 Keep ignition sources away - Do not smoke.
 Protect against electrostatic charges.
- **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:**
 The following constituents are the only constituents of the product which have 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) ppm Long-term value: (85) NIC-8.5 mg/m ³ , (20) NIC-2 ppm BEI, NIC-A3, NIC-OTO |

78-40-0 triethyl phosphate

| | |
|------|---|
| WEEL | Long-term value: 7.45 mg/m ³ |
|------|---|

- **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.
 Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.

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· 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: | White |
| 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: 32 °C (89.6 °F)

· Flammability (solid, gaseous): Not applicable.

· 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 % |
|---------------|-----------|

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| | |
|---|--|
| Upper: | 6.8 Vol % |
| · Vapor pressure at 20 °C (68 °F): | 6 hPa (4.5 mm Hg) |
| · Density at 20 °C (68 °F): | 1.35 g/cm ³ (11.27 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: | 2.3 % |
| VOC content: | 30.95 % |
| | 419.2 g/l / 3.50 lb/gl |
| · Solids content: | 10.8 % |
| · 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:**
?
Carbon monoxide and carbon dioxide

11 Toxicological information

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

| | | |
|---|----------|---------------------|
| · LD/LC50 values that are relevant for classification: | | |
| 100-42-5 Styrene | | |
| Oral | LD50 | 316 mg/kg (rat) |
| Inhalative | LC50/4 h | 24 mg/l (rat) |
| 1309-64-4 antimony trioxide | | |
| Oral | LD50 | >20,000 mg/kg (rat) |

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.

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- **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:
Harmful
Irritant

- **Carcinogenic categories**

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

| | | |
|------------|--------------------------------------|----|
| 100-42-5 | Styrene | 2B |
| 13463-67-7 | titanium dioxide | 2B |
| 1309-64-4 | antimony trioxide | 2B |
| 64-17-5 | ethanol | 1 |
| 7631-86-9 | silicon dioxide, chemically prepared | 3 |
| 7440-38-2 | arsenic | 1 |
| 7439-92-1 | lead | 2B |

· **NTP (National Toxicology Program)**

| | | |
|-----------|---------|---|
| 7440-38-2 | arsenic | K |
| 7439-92-1 | lead | R |

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

| | | |
|-----------|---------|--|
| 7440-38-2 | arsenic | |
|-----------|---------|--|

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.
- **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.

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- **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
- **Stowage Category** A

- **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**

- **DOT**
- **Quantity limitations** On passenger aircraft/rail: 60 L
On cargo aircraft only: 220 L

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- | | |
|-----------------------------------|---|
| · IMDG | 5L |
| · Limited quantities (LQ) | Code: E1 |
| · Excepted quantities (EQ) | 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 |

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

1309-64-4 antimony trioxide

- **TSCA (Toxic Substances Control Act) (Substances not listed):**

All ingredients are listed.

- **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.

- **Proposition 65**

- **Chemicals known to cause cancer:**

100-42-5 Styrene

13463-67-7 titanium dioxide

1309-64-4 antimony trioxide

7440-38-2 arsenic

7439-92-1 lead

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

7439-92-1 lead

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

7439-92-1 lead

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

64-17-5 ethanol

7439-92-1 lead

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

7440-38-2 arsenic

A

7439-92-1 lead

B2

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

| | | |
|------------|-------------------|----|
| 13463-67-7 | titanium dioxide | A4 |
| 1309-64-4 | antimony trioxide | A2 |
| 64-17-5 | ethanol | A3 |
| 7440-38-2 | arsenic | A1 |
| 7439-92-1 | lead | A3 |

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

| | |
|------------|------------------|
| 13463-67-7 | titanium dioxide |
| 7440-38-2 | arsenic |

· **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** Warning

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

Styrene
triethyl phosphate
antimony trioxide

· **Hazard statements**

Flammable liquid and vapor.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.

· **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting/equipment.
Wear protective gloves/protective clothing/eye protection/face protection.
If swallowed: Call a poison center/doctor if you feel unwell.
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 in a well-ventilated place. Keep cool.
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.

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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** 05/29/2018 / 4

· **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

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

Acute Tox. 4: Acute toxicity – Category 4

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

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

Carc. 2: Carcinogenicity – Category 2