

### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 02/07/2013 Reviewed on 02/07/2013

#### 1 Identification of the substance/mixture and of the company/undertaking

- · Product identifier
- · Trade name: P400 SR Soluble Support Material
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the preparation Soluble release material
- Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Stratasys, Inc. 7665 Commerce Way Eden Prairie, MN 55344 USA Tel +1 952 937 3000 Fax +1 952 937 0070

In Europe:

C.S.B. GmbH Parkstraße 29 D-47829 Krefeld Germany Tel.: +49-2151-6520860 Fax: +49-2151-6520869 E-Mail: info@csb-online.de

- · Information department: Product safety department.
- · Emergency telephone number: see above

#### 2 Hazards identification

· Classification of the substance or mixture

The product is not classified according to the Globally Harmonized System (GHS).

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC



Dangerous for the environment

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· Classification system:

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system
- · NFPA ratings (scale 0-4)



Health = 0 Fire = 1Reactivity = 0

· HMIS



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

(Contd. on page 2)

- USA



## Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 02/07/2013 Reviewed on 02/07/2013

Trade name: P400 SR Soluble Support Material

· **vPvB**: Not applicable.

(Contd. of page 1)

#### 3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Polymer

· Dangerous components:			
115-86-6	Triphenyl phosphate	<b>E</b> N R50/53	2.5-10%
		<b>♦</b> Acute Tox. 4, H302	
65652-41-7	Di-tert-butylphenyl phenyl phosphate	<b>X</b> Xi R38	< 2.5%
		🕔 Skin Irrit. 2, H315	

· Other components: Thermoplastic acrylic copolymer

#### 4 First aid measures

- Description of first aid measures
- · General information Remove contaminated clothing.
- · After inhalation Supply fresh air; consult doctor in case of complaints.
- · After skin contact

Wash with soap and water.

*If skin irritation continues, consult a doctor.* 

After contact with the molten product, cool rapidly with cold water.

Do not pull solidified product away from the skin.

Call a doctor immediately.

· After eye contact

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.

If symptoms persist consult 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 Firefighting 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

Oxides of phosphorus (PxOy)

Carbon monoxide and carbon dioxide

- Advice for firefighters
- · Protective equipment: Use suitable respiratory protective device.
- · Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

#### 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Avoid formation of dust.

Do not breathe dust.

(Contd. on page 3)



## Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 02/07/2013 Reviewed on 02/07/2013

Trade name: P400 SR Soluble Support Material

(Contd. of page 2)

Avoid contact with eyes.

· Environmental precautions:

Do not allow to enter sewers/surface or ground water.

Inform respective authorities in case product reaches water or sewage system.

· Methods and material for containment and cleaning up:

Pick up mechanically.

Dispose of the collected material according to regulations.

· Reference to other sections

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### 7 Handling and storage

· Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

If dust/smoke is developed, avoid breathing dust/smoke.

Avoid contact with eyes.

Make sure that all applicable workplace limits are observed.

Avoid contact with hot product.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles:

Observe all local and national regulations for storage of water polluting products.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well ventilated area.

· 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:

Observe all workplace limits for dust: TLV inhalable dust: 15 mg/m³ OSHA TLV respirable dust: 5 mg/m³ OSHA

#### 115-86-6 Triphenyl phosphate

 $\begin{array}{c|c} PEL & 3 \ mg/m^3 \\ REL & 3 \ mg/m^3 \\ TLV & 3 \ mg/m^3 \end{array}$ 

- · Additional information: The lists that were valid during the creation were used as basis.
- · Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

Do not inhale dust / smoke / mist.

Avoid contact with the eves.

Wash hands before breaks and at the end of work.

Breathing equipment:

If all workplace limits are observed and good ventilation is ensured, no special precautions necessary.

(Contd. on page 4)



#### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 02/07/2013 Reviewed on 02/07/2013

Trade name: P400 SR Soluble Support Material

(Contd. of page 3)

· Protection of hands:

No chemical-protective gloves required.

*Use heat resistant gloves when handling hot/molten product.* 

· Eye protection: Safety glasses

· Body protection: Wear heat-resistant protective clothing when handling hot/molten product.

#### 9 Physical and chemical properties

· Information on basic physical and chemical properties

General Information

· Appearance:

Form: solid Color: Dark brown · Odor: Acidic

no data available · Odor threshold:

Not applicable · pH-value:

· Change in condition

Melting point/Melting range: Not applicable **Boiling point/Boiling range:** Not applicable

> 427°C (> 801 °F) · Flash point:

· Flammability (solid, gaseous) Not determined

· Ignition temperature: Not determined

· Decomposition temperature: Not determined

· Auto igniting: Product is not selfigniting.

Danger of explosion: Product does not present an explosion hazard.

· Explosion limits:

Lower: Not determined Upper: Not determined · Oxidizing properties Not applicable Not determined

· Vapor pressure:

• Density at 20°C (68 °F): 1.25 g/cm³ (10.431 lbs/gal)

· Solubility in / Miscibility with

Insoluble Water:

· Viscosity:

dynamic: Not applicable kinematic: Not applicable

· Other information No further relevant information available.

#### 10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

Temperature over 300°C

No decomposition if used and stored according to specifications.

- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.

(Contd. on page 5)

(Contd. of page 4)



### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 02/07/2013 Reviewed on 02/07/2013

Trade name: P400 SR Soluble Support Material

· Incompatible materials:

Strong oxidizing agents

Alkaline materials

· Hazardous decomposition products:

Phosphorus oxides (e.g. P<sub>2</sub>O<sub>5</sub>)

Carbon monoxide and carbon dioxide

#### 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:

#### LD/LC50 values that are relevant for classification:

#### 115-86-6 Triphenyl phosphate

Oral LD50 | 1300 mg/kg (mouse) | 3800 mg/kg (rat) | Dermal LD50 | > 7900 mg/kg (rabbit)

- Primary irritant effect:
- on the skin: Dust particles may mechanically irritate the skin.
- on the eye: Dust particles may mechanically irritate the eye.
- · Sensitization: No sensitizing effects known.
- Additional toxicological information:

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

- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

#### 12 Ecological information

- · Toxicity
- · Aquatic toxicity:

#### 115-86-6 Triphenyl phosphate

EC50/48 h 1.35 mg/l (water flea (daphnia magna))

LC50/96 h | 0.36 mg/l (rainbow trout (oncorhynchus mykiss))

- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · **vPvB**: Not applicable.
- · Other adverse effects No further relevant information available.

USA

(Contd. on page 6)



# Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 02/07/2013 Reviewed on 02/07/2013

Trade name: P400 SR Soluble Support Material

(Contd. of page 5)

### 13 Disposal considerations

- · Waste treatment methods
- · Recommendation Disposal must be made according to local/official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to local/official regulations.

Transport information	
UN-Number DOT, ADR, IMDG, IATA	UN3077
UN proper shipping name DOT, IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Triphenyl phosphate)
ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Triphenyl phosphate)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Triphenyl phosphate), MARINE POLLUTANT
Transport hazard class(es)	
DOT, IMDG, IATA	
Class Label	<ul><li>9 Miscellaneous dangerous substances and articles.</li><li>9</li></ul>
ADR	
Class Label	9 (M7) Miscellaneous dangerous substances and articles 9
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards:	Product contains environmentally hazardous substances: TRIPHENYL PHOSPHATE
Marine pollutant:	Symbol (fish and tree)
Special marking (ADR): Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree)
Special precautions for user	Warning: Miscellaneous dangerous substances and articles
Danger code (Kemler): EMS Number:	90 F-A,S-F
Transport in bulk according to Annex MARPOL73/78 and the IBC Code	<b>II of</b> Not applicable.

- USA

(Contd. on page 7)



#### Material Safety Data Sheet acc. to ISO/DIS 11014

Printing date 02/07/2013 Reviewed on 02/07/2013

Trade name: P400 SR Soluble Support Material

(Contd. of page 6)

· Transport/Additional information:

· Remarks: Special marking with the symbol (fish and tree).

· UN "Model Regulation": UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (Triphenyl phosphate), 9, 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.

· TSCA (Toxic Substances Control Act)

None of the ingredients is listed.

- Cancerogenity categories
- · MAK (German Maximum Workplace Concentration)

None of the ingredients is listed.

- · National regulations
- Information about limitation of use: Employment restrictions concerning young persons must be observed.
- · Disturbance regulations:

Critical quantity values according to the regulations on accidents should be adhered to.

- · Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.
- · 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.

· Relevant phrases

The(se) R-phrase(s) are those of the ingredient(s) and do(es) NOT represent the classification of the preparation.

· Department issuing MSDS:

C.S.B. GmbH Phone: +49 - 2151 - 652086-0 Parkstraße 29 Fax: +49 - 2151 - 652086-9

D-47829 Krefeld

Germany

· 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 NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

\* Data compared to the previous version altered.