

We encourage and expect you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name BASIC RESIN

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: 3D Printing Resin

1.3 Details of the supplier of the safety data sheet

AprintaPro GmbH
 Römergasse 1a
 2353 Guntramsdorf
 Austria

1.4 EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: +43 660 4991879
 Local Emergency Contact: +43 660 4991879
 National Poisons Information Service City Hospital 844 892 0111

2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008:

Classification acc. to GHS			
Section	Hazard class	Hazard class and category	Hazard statement
3.2	Skin corrosion/irritation	Skin Irrit. 2	H315
3.3	Serious eye damage/eye irritation	Eye Irrit. 2	H319
3.4	Respiratory/skin sensitization	Skin Sens. 1	H317
3.8	Specific target organ toxicity — single exposure	STOT SE 3	H335
4.1	Hazardous to the aquatic environment	Aquatic Chronic 4	H413

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008:

Signal word

Warning

Pictograms



GHS07

Hazard statements

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H413	May cause long lasting harmful effects to aquatic life.

Precautionary statements

P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents/container in accordance with national regulations.

2.3 Other hazards

There is no additional information.

3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

-

3.2 Mixture

<u>Content</u>	<u>Classification</u>	<u>Concentration</u>
Proprietary	Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; STOT SE 3; H315, H319, H317, H335	75 - 93 %
Proprietary	Skin Sens. 1; H317	5 - 23 %
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide CAS: 162881-26-7; EG 423-340-5	Skin Sens. 1; Aquatic Chronic 4; H317, H413	0,5 - 3,5 %

4: FIRST AID MEASURES

4.1 Description of first aid measures
General notes

Take off contaminated clothing.

Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

Following ingestion

Rinse mouth. Call a doctor if you feel unwell.

Version: 1.0

4.2 Most important symptoms and effects, both acute and delayed

Irritation

4.3 Indication of any immediate medical attention and special treatment needed

none.

5: FIREFIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

none

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous combustion products

In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO₂).

5.3 Advice for firefighters

Vapours are heavier than air. Beware of reignition. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

6: ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Avoid contact with skin and eyes. Avoidance of ignition sources. Provide adequate ventilation.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

6.3 Methods and materials for containment and cleaning up Small spills**Advice on how to contain a spill**

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

7: HANDLING AND STORAGE

Version: 1.0

7.1 Precautions for safe handling

Provide adequate ventilation as well as local exhaust at critical locations.
When not in use, keep containers tightly closed.

Measures to prevent fire as well as aerosol and dust generation

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge.

Advice on general occupational hygiene

Wash hands before breaks and after work. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. May cause decomposition by long-term light influence.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

Ground/bond container and receiving equipment.

Ventilation requirements

Use local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 – 25 °C.

7.3 Specific end use(s)

No information available.

8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Human health values

		<u>Workers</u>	<u>Consumers</u>
Acute systemic effects	Dermal	n.a.	n.a.
	Inhalation	n.a.	n.a.
Acute local effects	Dermal	n.a.	n.a.
	Inhalation	n.a.	n.a.
Long-term systemic effects	Dermal	3,33 mg/kg bw/day	n.a.
	Inhalation	1,75 mg/m ³	n.a.
	Oral	n.a.	n.a.
Long-term local effects	Dermal	n.a.	n.a.
	Inhalation	n.a.	n.a.

8.2 Exposure controls

Engineering controls

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection

BASIC RESIN

Revision: 30.09.2020

Version: 1.0

Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

Skin protection Hand protection

Use gloves chemically resistant to this material when prolonged or frequently repeated contact could occur. Use chemical resistant gloves classified under Standard EN374: Protective gloves against chemicals and micro-organisms. Examples of preferred glove barrier materials include: Butyl rubber. Ethyl vinyl alcohol laminate („EVAL“). Examples of acceptable glove barrier materials include: Natural rubber („latex“). Neoprene. Nitrile/butadiene rubber („nitrile“ or „NBR“). Polyvinyl chloride („PVC“ or „vinyl“). When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. Glove thickness alone is not a good indicator of the level of protection a glove provides against a chemical substance as this level of protection is also highly dependent on the specific composition of the material that the glove is fabricated from. The thickness of the glove must, depending on model and type of material, generally be more than 0.35 mm to offer sufficient protection for prolonged and frequent contact with the substance. As an exception to this general rule it is known that multilayer laminate gloves may offer prolonged protection at thicknesses less than 0.35 mm. Other glove materials with a thickness of less than 0.35 mm may offer sufficient protection when only brief contact is expected. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Other protection

When prolonged or frequently repeated contact could occur, use protective clothing chemically resistant to this material. Selection of specific items such as faceshield, boots, apron, or full-body suit will depend on the task.

Respiratory protection

Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator. Use the following CE approved air-purifying respirator: Organic vapor cartridge, type A (boiling point >65 °C, meeting standard EN 14387).

Environmental exposure controls

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties Appearance****Appearance**

Physical state	liquid (fluid)
Explosion limits of dust clouds	not relevant
Density	1,18 g/cm ³ at 20 °C
Explosive properties	Shall not be classified as explosive

9.2 Other information

-

10: STABILITY AND REACTIVITY

Version: 1.0

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions. See Storage, Section 7.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Keep away from heat.

10.5 Incompatible materials

Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous decomposition products

No data available

11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Shall not be classified as acutely toxic.

<u>Exposure route</u>	<u>Endpoint</u>	<u>Wert</u>	<u>Species</u>	<u>Source</u>
inhalation: vapour				
oral	LD50	>2.000 mg/kg	Rat	ECHA
dermal	LD50	>2000 mg/kg	Rabbit	ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Symptoms related to the physical, chemical and toxicological characteristics

If swallowed	gastrointestinal complaints, vomiting, aspiration hazard
If in eyes	Causes serious eye irritation
If inhaled	fatigue, dizziness

Version: 1.0

If on skin

repeated exposure may cause skin dryness or cracking

Other information

Other adverse effects: Vertigo, Headache, Narcosis, Dyspnoea

12: ECOLOGICAL INFORMATION

12.1 Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
LC50	16,4 mg/l	Danio rerio	OECD	96 h
EC50	1,17 mg/l	Daphnia magna	OECD	48 h
EC50	> 0,26 mg/l	Desmodesmus subspicatus	OECD	72 h
EC50	72,8 mg/l	Pseudokirchneriella subcapitata	OECD	72 h

Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time

12.2 Persistence and degradability

The substance is not biodegradable.

Process	Degradation rate	Time
aerob	1 %	28 d

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not available.

13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used.

13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

14: TRANSPORT INFORMATION

	ADR/RID	IMDG	ICAO-IATA
UN number	-	-	-
Proper shipping name	Not dangerous goods	Not dangerous goods	Not dangerous goods
Transport hazard class(es)	-	-	-
Packing group	-	-	-
Hazard identification	No	Marine pollutant: No	No
Special precautions for user	No data available	No data available	No data available

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15: REGULATORY INFORMATION

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

Relevant provisions of the European Union (EU)

Listed in Regulation

Not applicable

Further information

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Seveso Directive

-

Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content 0 %

VOC content 0 g/l

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

16: OTHER INFORMATION

Abbreviations and acronyms

Abk	Beschreibungen der verwendeten Abkürzungen
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	ceiling value
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
index No	the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	short-term exposure limit
SVHC	Substance of Very High Concern
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

Key literature references and sources for data

Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Regulation (EC) No. 1272/2008 (CLP, EU GHS)

Dangerous Goods Regulations (DGR) for the air transport (IATA)

International Maritime Dangerous Goods Code (IMDG)

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

Disclaimer

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.