



SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

1.1. Product Name: 3D Filament (Polylactic Acid)

26153D01AA	PMS (tbd)
26153D02AA	PMS 419
26153D03AA	PMS 032
26153D04AA	PMS 130
26153D05AA	PMS 527
26153D06AA	PMS 286
26153D07AA	PMS 354
26153D50AA	PMS 8402
26153D51AA	PMS 8643
26153D70AA	PMS 427

1.2. Date of issue: August 18, 2014

1.3. Manufacturer/Distributor:

Robert Bosch Tool Corporation
1800 W. Central Road
Mt. Prospect, IL 60056

1.4. For More Information Call:

(Monday-Friday, 8:00 AM– 5:00 PM CST)
Bosch Customer Service
(877) 267-2499

In Case Of Emergency Call:

(24 Hours/Day, 7 Days/Week)
(877) 303-0891

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]: Not a hazardous substance or mixture according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC: N/A

Information concerning particular hazards for human and environment: The product has not been classified as dangerous according to Directive 67/548/EEC and 1999/45/EC.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008[CLP]

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Precautionary statement(s): Void

2.3. Other hazards



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Results of PBT and vPvB assessment

PBT: N/A

vPvB: N/A

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Chemical characterization: Mixtures.

Formula: N/A

Molecular weight: N/A

Components		Concentration (%)
CAS: 9051-89-2 EINECS: /	Polylactic acid	98
CAS: 13463-67-7 EINECS: 236-675-5	Titanium dioxide	0.7
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black	0.5
CAS: 57455-37-5 EINECS: /	Ultramarine blue	0.8

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

After inhalation: Remove to fresh air. If breathing is labored or stopped, give artificial respiration. Get immediate medical attention.

After skin contact: Wash with water.

After eye contact: Flush eyes with large amounts of water at least 15 minutes. Consult a physician if irritation persists.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3. Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing agents: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Carbon oxides.

5.3. Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus for fire fighting.

5.4. Further information

No data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use the personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas.



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6.2. Environmental precautions

Prevent product from entering drains or open waters.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4. 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.

SECTION 7: HANDLING AND STORAGE

7.1. Handling

Precautions for safe handling: Provide appropriate exhaust ventilation at places where dust is formed.

Normal measures for preventative fire protection.

Information about fire – and explosion protection: Keep away from fire.

7.2. Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and receptacles:

Store in a cool, dry, well-ventilated area.

Information about storage in one common storage facility: Store away from fire.

Further information about storage conditions: Store away from heat source.

7.3. Specific end use(s): No further information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see section 7.

8.1. Control parameters

DNELs: Not applicable.

PNECs: Not applicable.

Additional information: No known exposure limit.

8.2. Exposure controls

Appropriate engineering controls: Washing hands before rest or at the end of work.

Personal protective equipment

General protective and hygienic measures:

Respiratory protection: Respiratory protection is not required.

Protection of hands: None needed under normal use.

Eye protection: None needed under normal use.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

General information

Appearance:

Form: Solid

Color: Light yellow, Cotton White, Deep Black, Racecar Red, Electric Orange, Purple Orchid, Dremel Blue, Grass Green, Silver Spoon, Gold Medal, Natural White.

Odor: odorless

Odor threshold: Not applicable

pH-value: Not applicable.

Change in condition:

Melting point/Melting range: >176°C

Boiling point/Boiling range: No data available

Flash point: Not applicable (no flash point)

Flammability (solid, gaseous): Slight

Auto-ignition temperature: >380°C



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Self-igniting: Product is not self-igniting

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

Explosion limits:

Lower: Not applicable

Upper: Not applicable

Oxidizing properties:

Vapor pressure: Not available

Density: >1 (water=1)

Evaporation rate: Not available

Solubility in/Miscibility with water: Insoluble in water

Partition coefficient (n-octanol/water):

Viscosity:

Dynamic: Not applicable

9.2. Other information

No further relevant information available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No dangerous reactions known.

10.2. Chemical stability

Stable at normal temperatures and storage conditions.

10.3. Thermal decomposition

No decomposition if used according to specifications.

10.4. Possibility of hazardous reactions

No dangerous reactions known.

10.5. Conditions to avoid

Exposure to high temperatures and direct flames.

10.6. Incompatible materials

Strong oxidizing agents.

10.7. Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity: Non-toxic

Primary irritant effect:

On the skin: No irritation, non-sensitizing

On the eye: Slight irritating to the eyes.

Sensitization: Sensitization impossible through skin contact.

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.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to aquatic organism: Non-toxic.

12.2. Persistence and degradability

Degradation products are less toxic than the original product.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.



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12.5. Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6. Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recommendation: Small amounts can be discarded with household waste. Dispose of bigger amounts in accordance with Local Authority requirements.

13.2. Uncleaned packaging:

Recommendation: Follow all local, state, and federal regulations for disposal of waste chemicals.

SECTION 14: TRANSPORT INFORMATION

14.1. UN-Number

ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

14.2. UN proper shipping name

ADR: Not dangerous goods for transport.

IMDG: Not dangerous goods for transport.

IATA: Not dangerous goods for transport.

14.3. Transport hazard class(es)

ADR: Not regulated.

IMDG: Not regulated.

IATA: Not regulated.

14.4. Packing group

ADR: Not applicable.

IMDG: Not applicable.

IATA: Not applicable.

14.5. Special precautions for user

Don't transport at high temperatures.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health, and environment regulations/legislations specific for the substance or mixture.

No specifically regulations for this product.

15.2. National regulations:

SVHC Candidate List of REACH Regulation Annex XIV Authorization (12/19/2011)

REACH Regulation Annex XVII Restriction (2/9/2012)

REACH Regulation Annex XIV Authorization List (2/15/2012)

15.3. Chemical safety assessment

SECTION 16: OTHER INFORMATION

16.1. Relevant phrases

None.

16.2. 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

IATA: International Air Transport Association



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GHS: Globally Harmonized System of Classification and Labeling of Chemicals

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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