

Safety Data Sheet

According to EU Directive 1907/2006

Product name: ASA PRO-DM

Date of issue: 31-05-2018

Version: 1.2

1. Identification of the substance/preparation and of the company

1.1 Trade name:

ASA PRO-DM

1.2 Use of the product:

3Dprinter Filament

1.3 Supplier:

DELRAY Systems
419 Golf View Lane
Rochester, MI 48309
(248)218-1916

2. Hazards identification

2.1 Classification of the substance or mixture classification (REGULATION (EC) No 1272/2008)

This product is not classified according to Regulation (EC) 1272/2008 and Directive 67/548/EEC.

2.2 Label elements

Not applicable.

3. Composition/information on ingredients

3.2 Mixtures

None of the substances, named in the Candidate list art. 59 (1,10) of the REACH regulation EC no. 1907/2006 has been used in a concentration > 0,1%.

4. First aid measures

4.1 Description of first aid measures

General advice:

If you feel unwell, seek medical advice (show the label where possible). Never give anything by mouth to an unconscious person. Take off contaminated clothing and shoes immediately.

If inhaled:

in case of gases evolving from molten filament, move person into fresh air.

skin contact with molten filament:

rinse well with water. If skin irritation persists, call a physician.

In case of eye contact with molten filament:

If easy to do, remove contact lens, if worn.

In the case of contact with eyes,

rinse immediately with plenty of water and seek medical advice.

If swallowed:

Rinse mouth with water. Induce vomiting immediately and call a physician. If a person vomits when lying on his back, place him in the recovery position.

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4.2 Most important symptoms and effects, both acute and delayed
no data available

4.3 Indication of any immediate medical attention and special treatment needed
no data available

5. Fire fighting measures

5.1 Extinguishing media
Suitable extinguishing media:
Water spray, Dry chemical agents, Carbon dioxide (CO₂).Foam
Unsuitable extinguishing media :
Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture
In case of fire may be liberated: carbon monoxide and carbon dioxide (CO₂).

5.3 Advice for fire fighters
Fire fighting measures
Wear a self-contained breathing apparatus and chemical protective clothing.
Unusual Fire Hazards:
Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. In the event of fire and/or explosion do not breathe fumes.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid breathing gases from molten filament. Ensure adequate ventilation, especially in confined areas.

6.2 Environmental precautions
Do not allow to enter public sewers and watercourses.

6.3 Methods and materials for containment and cleaning up
Use mechanical handling equipment. Keep in suitable, closed containers for disposal. Clean contaminated surface thoroughly.

7. Handling and storage

7.1 Handling
Avoid contact with molten material. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures

Prevention of Fire and Explosion:
Not available

7.2 Conditions for safe storage, including any incompatibilities
Keep container closed.
Protect from direct sunlight and all heat sources in order to avoid sintering.
Store container in a well dry/cool place.
Keep away from waterways and sewers.
Keep away from any source of ignition.

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Other precautions:

- Avoid contamination of foods.
- Avoid inhalation of dust during the processing of the resin

8. Exposure controls/personal protection

8.1 Control parameters

- Dnel: Dnel/Dmel- values are not available.
- PNEC: PNEC- values are not available.

8.2 Exposure controls

- Engineering measures
- Provide adequate ventilation while printing.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Solid Filament
Odour	Neutral
Colour	depending on product grade
Odour threshold	No information available
pH	Not applicable
Melting/freezing point	140~170°C/ -
Initial boiling point and boiling range	Not applicable
Flash point	No information available
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	UEL: No data available LEL: No data available
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	Not measured
Solubility(ies)	Insoluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	not self-igniting
Decomposition temperature	>280 °C
Viscosity	Not applicable
Explosive properties	No information available
Oxidizing properties	No information available

10. Stability

10.1 Reactivity:

The product is stable and non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability:

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions:

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None Known

10.4 Conditions to avoid:

Avoid elevated temperatures for prolonged periods of time.

10.5 Incompatible materials:

Materials to avoid: Strong oxidizing materials.

10.6 Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity:	Not known.
Skin corrosion/irritation:	Not irritating.
Serious eye damage/eye irritation:	No data available.
Respiratory or skin sensitization:	No sensitization.
Reproductive toxicity:	Negative.
Carcinogenicity:	No data available.

12. Ecological information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

Difficult to degrade.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available.

13. Disposal considerations

13.1 Waste treatment methods

Advice on disposal and packaging: Disposal in accordance with local and national regulations.

14. Transport information

14.1 UN number

Not regulated as a hazardous material.

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

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14.4 Packing Group

Not applicable

14.5 Environmental hazards

No additional data is available

14.6 Special precautions for user

No data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not evaluated

15. Regulatory information

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

EU regulation (EC) 1907/2006 (Reach) ANNEX XVII (restrictions) Not applicable.

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out

16. Other information

Information is referenced from other manufacturers.

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 and Regulation (EC) No. 2015/830. Label element according to Regulation (EC) No 1272/2008.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.