ABS

MSDS- Material Safety Data Sheet

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

Date of compilation: 10.07.2015

1.1 Product Identifiers

Trade Name: 3ntr ABS

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

No further relevant information available.

Application of the substance / the preparation: 3d printing filament

· 1.3 Details of the supplier of the safety data sheet

Supplier:

Jdeal-Form srl

via Montegiudeo 9

28047 Oleggio (No)

Italy

Tel. ++39 32191528

E-mail address of the competent person responsible for the Safety Data Sheet: davide@3ntr.net

Informing department: Product safety department

1.4 Emergency telephone number

As above or next toxicological information centre.

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

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

Classification system: The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

2.2 Label elements

Labelling according to EU guidelines:

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version. Observe all safety regulations when handling chemicals.

Additional information: Void

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/Information on ingredients

Description: Polymer

Other components:

CAS: 9003-56-9

Polymer

Acrylonitrile/butadiene/styrene copolymer 98%

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Remove contaminated clothing.

After inhalation:

Supply fresh air; consult doctor in case of symptoms. After inhalation of decomposition products, remove the affected person to a source of fresh air and keep calm. Provide medical aid.

After skin contact:

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 doctor. Remove contact lenses, if present and easy to do.

After swallowing:

Drink water as a precaution. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. Call a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), no additional symptoms and effects are anticipated.

4.3 Indication of any immediate medical attention and special treatment needed

If burn is present, treat as any thermal burn, after decontamination. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION 5: Firefighting measures

FLAMMABILITY:

Autoignition temperature: 388°C

5.1 Extinguishing media

Foam. Water. CO2. Dry chemical. Alcohol resistant foams are preferred if available.

5.2 Hazardous decomposition products

Burning produces obnoxious and toxic fumes Aldehydes, Carbon Monoxide (CO), Carbon Dioxied (CO2)

5.3 Advice for firefighters

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. If material is molten, do not apply direct water stream. Use fine water spray or foam. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Spilled material may cause a slipping hazard. Use appropriate safety equipment.

For additional information, refer to Section 8, Exposure Controls and Personal Protection.

6.2 Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

6.3 Methods and materials for containment and cleaning up

Sweep up. Collect in suitable and properly labeled containers.

Section 7. Handling and Storage

7.2 Precautions for safe handling

General Handling:

No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Avoid breathing process fumes. Use with adequate ventilation. When appropriate, unique handling information for containers can be found on the product label. Workers should be protected from the possibility of contact with molten resin. Do not get molten material in eyes, on skin or clothing. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge.

7.3 Conditions for safe storage, including any incompatibilities storage

Store in accordance with good manufacturing practices, in cool place and far from direct sunlight.

Section 8.

8.1 Control parameters

None established.

8.2 Exposure Controls

Personal protection

Eye/Face Protection: Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent. If there is a potential for exposure to particles which could cause eye discomfort, wear chemical goggles. Chemical goggles should be consistent with EN 166 or equivalent. If exposure causes eye discomfort, use a full-face respirator.

Skin Protection: No precautions other than clean body-covering clothing should be needed.

Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. Use gloves with insulation for thermal protection (EN 407), when needed. Use gloves to protect from mechanical injury. Selection of gloves 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. Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present. Use the following CE approved air-purifying respirator: When dust/mist are present use a/an Particulate filter, type P2. When combinations of vapors, acids, or dusts/mists are present use a/an Organic vapor cartridge with a particulate pre-filter, type AP2.

Engineering Controls

Ventilation: 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

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: solid

Color: Clear, Translucent, opaque

Odor: sweet

Odor threshold: N/A

pH: N/A

Melting point: N/A

Freezing point: N/A

Boiling point: N/A

Flash point: N/A

Flammability: N/A

Specific Gravity: 1,24 g/cc

Solubility in water: Insoluble

Autoignition Temp.: N/A

Decomposition Temp.: 250°C

Oxidizing properties: N/A

Section 10. Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under consideration of normal use

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Polymerization will not occur

10.4 Conditions to Avoid

Avoid temperatures above 240°C. Exposure to elevated temperatures can cause product to decompose

10.5 Incompatible Materials

Oxidizing agents. Strong bases.

10.6 Hazardous decomposition products

Burning produces obnoxious and toxic fumes: Aldehyde, Carbon Monoxide (CO), Carbon Dioxide (CO2)

Section 11. Toxicological Information

Principle routes of exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Acute toxicity: there were no target organ effects noted following ingestion or dermal exposure.

Local Effects: may cause eye/skin irritation. Product dust may be irritating to eyes, skin and respiratory system. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Long term toxicity: none

Specific effects: may cause skin irritation or dermatitis. Burning produces irritant fumes.

Mutagenic effects: none

Reproductive toxicity: no data available

Carcinogenic effects: no data available

Target organ effects: none

Section 12. Ecological Information

12.1 Bioaccumulative potential

Does not bioaccumulate. Inherently biodegradable.

12.2 Mobility in soil

In the terrestrial environment, material is expected to remain in the soil.
In the aquatic environment, material will sink and remain in the sediment.

Section 13. Disposal Considerations

13.1 Waste treatment methods

For uncontaminated material the disposal options include mechanical and chemical recycling or energy recovery. In some countries landfill is also allowed. For contaminated material the options remain the same, although additional evaluation is required. For all countries the disposal methods must be in compliance with national and provincial laws and any municipal or local by-laws. All disposal methods must be in compliance with the EU framework Directives 2008/98/EC and their subsequent adaptations, as implemented in National Laws and Regulations, as well as EU Directives dealing with priority waste streams. Trans boundary shipment of wastes must be in compliance with Regulation (EC) No 1013/2006 and subsequent modifications.

Section 14. Transport Information

Not Classified – not regulated ad hazardous material.

Section 15. Regulatory Information

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

USA TSCA Inventory list: Listed

Canada DSL Inventory list: Listed

Reach/EU EINECS list: Listed

Japan ECL: Listed

Australia AICS: Listed

Section 16. Other Information

The information herein is given in good faith, but no warranty, express or implied, is made.

Consult the Company for further information