Safety data sheet
according to Regulation (EC) No 1907/2006

TECACOMP PA6 ID

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

Product identifier:
TECACOMP PA6 ID blue 1053686

Relevant identified uses of the substance or mixture:
Industrial use, Plastics/polymer processing (e.g. injection moulding, extrusion)

Details of the supplier of the safety data sheet:
Ensinger GmbH
Rudolf-Diesel-Straße 8
D - 71154 Nufringen
Tel. +49 7032 819 0
www.ensingerplastics.com

Competent person:
sdb@ensingerplastics.com

2. Hazards identification

Classification of the substance or mixture according to Regulation (EC) No 1272/2008 (CLP/GHS):
The product is not classified as hazardous.

Label elements:
The mixture is not subject to specific labelling in accordance with GHS criteria.

Other hazards:
Contact with molten product may cause severe burns.
Danger of slipping due to spilled product.

The mixture does not contain substances with a content of 0.1% or more that are classified as PBT or vPvB or have endocrine disrupting properties.

3. Composition/information on ingredients

Description of the mixture:
Mixture based on polyamide 6 (PA 6), CAS No 25038-54-4.
Containing detectable fillers.
Possibly containing additives and processing aids.

Information on ingredients:
Does not contain hazardous substances legally required for labelling.

4. First aid measures

After inhalation:
After inhalation of thermal decomposition products, remove person from the danger zone. Oxygen supply, apply artificial respiration if necessary. Keep quiet, warm and seek medical help.

After skin contact:
After contact with molten polymer, immediately cool with cold water for a prolonged time. Remove affected clothing. Do not peel polymer from skin. Cover burns with sterile dressings. Burns caused by molten polymer must be treated in a hospital.

After eye contact:
After contact with molten polymer cool immediately with plenty of cold water. Contact an eye specialist.

After ingestion:
In case of persistent symptoms seek medical help.

Most important symptoms and effects, both acute and delayed:
No hazard is expected under intended use and appropriate handling.

Indication of any immediate medical attention and special treatment needed:
Treat symptomatically.

5. Firefighting measures

Suitable extinguishing media:
Water spray, alcohol-resistant foam, carbon dioxide, dry chemical foam.

Unsuitable extinguishing media:
Water jet.

Special hazards arising from the substance or mixture:
With carbonization and incomplete combustion toxic gases develop, predominantly carbon dioxide and carbon monoxide. The development of further fission and oxidation products is dependent on the conditions of burning.
Traces of other toxic substances may develop under certain conditions of burning.
The release of hydrogen cyanide is possible.

Advice for firefighters:
If exposed to fumes and carbonization gases during fire-fighting measures, rescue operations and cleanup wear a self-contained breathing apparatus.
The product ignites in a flame and continues to burn on removal of the source.
In an advanced state of fire, the molten polymer must be cooled with water. Water used to extinguish the fire and fire remainders must be collected and water disposed of, in accordance with local regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Collect spilled product (Danger of slipping).

Environmental precautions:

Prevent the product from being released into the environment. Do not allow it to enter surface water and sewage water system. Take particular care during filling/transferring and loading/unloading operations to ensure that the product is not spilled. Use suitable collection devices. Keep packaging closed; immediately secure damaged packaging. Immediately collect and dispose of spilled product.
Comprehensive guidelines for preventing the release of plastic granules, flakes and powder into the environment, both during use and disposal, are provided by the industry programme "Operation Clean Sweep" (OCS).

Methods and material for containment and cleaning up:

Mechanically collect spilled product/product residue.
Avoid dry sweeping. Use an appropriate suction device for cleaning to avoid the generation of dust.

7. Handling and storage

Precautions for safe handling:

Avoid overheating of material by improper handling.
The relevant information on the technical data sheet have to be respected.
Under very high processing temperatures or excessively long residence harmful gases and vapours might develop.
Use with adequate ventilation. Local exhaust ventilation should be provided.
Avoid creating dusty conditions. Take measures against static discharge. Keep away from sources of ignition.

General industrial hygiene regulations are to be observed.
Wash hands before breaks and at the end of workday.
Food should not be kept in the workplace.
Do not eat, drink or smoke in the work area.

Conditions for safe storage, including any incompatibilities:

The appropriate company regulations for fire prevention are to be followed.
Keep cool and dry in a firmly closed container.

8. Exposure controls/personal protection

Control parameters:

Substances with working place related, limits to be monitored or with biological limits are contained or may be released during processing:

The general limit for dust is valid.

substance	EC No	CAS No	exposure limit value	biological limit value	comment	source	country (type)
ε-Caprolactam	203-313-2	105-60-2	10 mg/m³		dust + vapour	Workplace Exposure Limit (WEL)	UK
general dust limit value (a-dust)			4 mg/m³		respirable fraction	Workplace Exposure Limit (WEL)	UK
general dust limit value (e-dust)			10 mg/m³		inhalable fraction	Workplace Exposure Limit (WEL)	UK

Exposure controls:

The working area should be well ventilated.

Technical measures have priority over personal protective equipment.

Respiratory protection:

If technical measures are insufficient, protective breathing apparatus must be worn. Use dust mask with at least filter type P2 (DIN EN 140/142/143) or filter apparatus with ventilator and helmet or hood, at least TH2P (DIN EN 12941).

Eye/face protection:

Safety goggles with side protection (DIN EN 166) or face protection required if there is a risk of liquid plastic melt being released.

Hand protection/skin protection:

When handling hot plastic melts use heat-resistant gloves (DIN EN 407) e.g. made from leather. Wear long-sleeved work clothing of cotton.

Skin protection should be used (barrier cream containing tanning agent).

9. Physical and chemical properties

Appearance:
solid (pellets)

Melting point/Melting range:
ca. 220 °C

Relative density:
ca. 1,27 g/cm³

Flash point:
N/A (solid)

Flammability (solid, gas):
> 400 °C

Vapour pressure:
N/A (solid)

Solubility(ies):
insoluble (water, 20 °C)

Auto-ignition temperature:
N/A

Viscosity:
N/A (solid)

Oxidising properties:
N/A

Other information:
No data available.

Odour/odour threshold:
product-specific

Initial boiling point and Boiling range:
N/A (solid)

pH (20 °C):
N/A (solid)

Evaporation rate:
N/A

Upper/lower flammability or explosive limits:
N/A

Vapour density:
N/A

Partition coefficient: n-octanol/water:
N/A

Decomposition temperature:
> 300 °C

Explosive properties:
Product dust might form explosive mixtures with air.

10. Stability and reactivity

Reactivity:
No hazardous reactions known when stored and handled according to instructions and used for its intended purpose.

Chemical stability:
Product is stable. No hazardous reactions known when stored and handled according to instructions and used for its intended purpose.

Possibility of hazardous reactions:
No hazardous reactions known when stored and handled according to instructions.

Conditions to avoid:
Do not heat to a temperature above the decomposition temperature.

Incompatible materials:
Strong acids and strong oxidizing agents.

Hazardous decomposition products:
No decomposition when handled according to instructions.
By strong overheating of the material carbon monoxide, hydrogen cyanide and other toxic organic vapours can be generated.

11. Toxicological information

Acute toxicity:
Contact with molten product can cause burns.

Chronic toxicity:
When used and handled according to specifications, the product does not have any harmful effects.

Other information:
In our experience and according to the literature provided to us the product does not cause any noxious effects when used and handled according to regulations.

12. Ecological information

Toxicity:
Data about ecological effects are not available for this product.

Persistence and degradability:
No data available.

Bioaccumulation potential and mobility in soil:
Biodegradability is not probable due to the consistency as well as the insolubility in water of the product.

Results of the PBT and vPvB assessment:
The product does not fulfil the criteria for classification as PBT or vPvB.

Other adverse effects:
No relevant information available.
Based on current knowledge, no negative ecological effects are to be expected if handled and disposed of properly.

13. Disposal considerations

Waste treatment methods:
Product residues can be recycled or treated in an energy recovery plant.
When segregated, unpolluted product residues can be recycled mechanically.

European waste cataloque:
The unpolluted product has no dangerous properties and is therefore not a hazardous waste within the meaning of regulation on the european List of wastes.

Waste codes/waste identification:
The exact waste code must be carried out source- and use-related.
Proposals for the waste code numbers based on the probable use of the unpolluted product:
07 02 13 (waste plastic)
20 01 39 (plastics from separately collected fractions)

Packaging:
Uncontaminated or cleaned packaging can be recycled without verification.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

UN number:
Not applicable.

UN proper shipping name:
Not applicable.

Transport hazard class(es):
Not applicable.

Packing group:
Not applicable.

Environmental hazards:
Not applicable.

Special precautions for user:
No special precautions.

Transport in bulk according to Annex II of Marpol and the IBC Code:
Not applicable.

15. Regulatory informaton

Safety, health and environmental regulations/legislation specific:
The mixture does not contain any substance meeting the criteria in Article 57 and identified in accordance with Article 59(1).

EU regulations:
Annex XVII to Regulation (EC) No 1907/2006: List number: 78
The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.
Content of synthetic polymer micropaticles (SPM): > 70 - ≤ 90%
Information on the identity of the SPM polymers contained: see section 3.

Chemical safety assessment:
A chemical safety assessment has not been carried out.
The product is not classified as hazardous.

National regulations:
Storage class TRGS 510 (Germany): 11 (flammable solid materials)

16. Other information

The full text of hazard statements:

No H-phrases listed in the document.

Indication of changes:

Vertical lines in the left margin indicate changes compared to the previous version.
Status as of 09/26.
Previous version V02.1, status as of 10/23.

Our information and statements reflect the current state of our knowledge and shall inform about our products and their applications. They do not assure or guarantee chemical resistance, quality of products and their merchantability in a legally binding way. Our products are not defined for use in medical or dental implants. Existing commercial patents have to be observed. The corresponding values and information are no minimum or maximum values, but guideline values. They do not represent guaranteed properly values and therefore they must not be used for specification purposes. The customer is solely responsible for the quality and suitability of products for the application and has to test usage and processing prior to use. It is the user`s responsibility to ensure that existing legislation and regulation are followed.