



1. Identification

Product identifier

FLEXA SOFT

Product code: 7_

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

Use of the substance/mixture

Powder material for selective laser sintering (SLS) process

Uses advised against

any non-intended use.

Details of the supplier of the safety data sheet

Company name:	Sinterit Sp. z o. o.
Street:	Nad Drwina 10 bud. B3
Place:	PL-30-741 Krakow
Telephone:	+48 570 697 854
e-mail:	contact@sinterit.com
Contact person:	K. Glowacki
Responsible Department:	E-Mail: contact@sinterit.com Sinterit sp. z o.o., Nad Drwina 10 bud. B3, 30-741 Krakow, Poland

2. Hazard identification

Classification of the substance or mixture

WHMIS 2015

This mixture is not classified as hazardous in accordance with WHMIS 2015.

Label elements

Additional advice on labelling

Label elements GHS: None

Other hazards

No risks worthy of mention. Please observe the information on the safety data sheet at all times.

3. Composition/information on ingredients

Mixtures

Chemical characterization

TPU

The product does not contain dangerous substances to be mentioned in Chapter 3.

4. First-aid measures

Description of first aid measures

General information

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).



After inhalation

In case of accident by inhalation: remove casualty to fresh air and keep at rest. In case of respiratory tract irritation, consult a physician.

After contact with skin

Gently wash with plenty of soap and water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse cautiously with water for several minutes.

After ingestion

Rinse mouth thoroughly with water. Let water be drunk in little sips (dilution effect). Do NOT induce vomiting. In all cases of doubt, or when symptoms persist, seek medical advice.

Most important symptoms and effects, whether acute or delayed

No information available.

Indication of immediate medical attention and special treatment needed

Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Kohlendioxid (CO₂). Dry extinguishing powder. alcohol resistant foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

Specific hazards arising from the hazardous product

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxides (NO_x). Hydrogen cyanide (hydrocyanic acid)

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Co-ordinate fire-fighting measures to the fire surroundings.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid dust formation.
Do not breathe dust.
Wear personal protection equipment (refer to section 8).

Environmental precautions

Discharge into the environment must be avoided.

Methods and material for containment and cleaning up

Take up mechanically.
Treat the recovered material as prescribed in the section on waste disposal.
Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13



7. Handling and storage

Precautions for safe handling

Advice on safe handling

Wear suitable protective clothing. (See section 8.)

Advice on protection against fire and explosion

Usual measures for fire prevention.

Further information on handling

General protection and hygiene measures: refer to chapter 8

Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Do not store together with: Explosives. Oxidizing solids. Oxidizing liquids. Radioactive substances. Infectious substances. Food and animal feedingstuff.

Further information on storage conditions

Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: < 40°C

Protect against: frost. UV-radiation/sunlight. heat. Humidity

8. Exposure controls/Personal protection

Control parameters

Additional advice on limit values

Quebec:

Inhalable Dust fraction: TWA: - ppm, 10 mg/m³; STEL/ Ceiling Limit: - ppm, - mg/m³

Alberta:

Inhalable Dust fraction: TWA: - ppm, 10 mg/m³; STEL/ Ceiling Limit: - ppm, - mg/m³

Respirable Dust fraction: TWA: - ppm, 3 mg/m³; STEL/ Ceiling Limit: - ppm, - mg/m³

British Columbia:

Inhalable Dust fraction: TWA: - ppm, 10 mg/m³; STEL/ Ceiling Limit: - ppm, - mg/m³

Ontario:

Inhalable Dust fraction: TWA: - ppm, 10 mg/m³; STEL/ Ceiling Limit: - ppm, - mg/m³

Respirable Dust fraction: TWA: - ppm, 3 mg/m³; STEL/ Ceiling Limit: - ppm, - mg/m³

Exposure controls

Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

Dust should be exhausted directly at the point of origin.

Protective and hygiene measures

Always close containers tightly after the removal of product. When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work.

Eye/face protection

Dust protection goggles.

Hand protection

In case of prolonged or frequently repeated skin contact:



Safety Data Sheet

FLEXA SOFT

Sinterit Sp. z o. o.

Revision date: 29.10.2021

Print date: 01.11.2021
according to WHMIS

Wear suitable gloves.

Suitable material:

FKM (fluororubber). - Thickness of the glove material: 0,4 mm

Breakthrough time \geq 8 h

Butyl rubber. - Thickness of the glove material: 0,5 mm

Breakthrough time \geq 8 h

CR (polychloroprenes, Chloroprene rubber). - Thickness of the glove material: 0,5 mm

Breakthrough time \geq 8 h

NBR (Nitrile rubber). - Thickness of the glove material: 0,35 mm

Breakthrough time \geq 8 h

PVC (Polyvinyl chloride). - Thickness of the glove material: 0,5 mm

Breakthrough time \geq 8 h

The selected protective gloves should satisfy the specifications of standards like EN 374.

Before using check leak tightness / impermeability. In the case of wanting to use the gloves again, clean them before taking off and air them well.

Skin protection

Suitable protective clothing: Lab apron.

Respiratory protection

With correct and proper use, and under normal conditions, breathing protection is not required.

Respiratory protection necessary at:

-Exceeding exposure limit values

-Insufficient ventilation and Generation/formation of dust

Suitable respiratory protective equipment: Particulate Respirators, Standard: 42 CFR Part 84 or DIN 143 or regional standards like Z94.4.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Environmental exposure controls

No special precautionary measures are necessary.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:	solid	
Colour:	grey	
Odour:	odourless	
pH-Value:		not determined

Changes in the physical state

Melting point/freezing point:	>145 °C
Boiling point or initial boiling point and boiling range:	not determined
Sublimation point:	not determined
Softening point:	not determined
Pour point:	not determined
Flash point:	>200 °C
Sustaining combustion:	Not sustaining combustion



Explosive properties

Dust clouds may present an explosion hazard.

Lower explosive limits: 20 - 70 g/m³

Upper explosive limits: not determined

Auto-ignition temperature: not determined

Self-ignition temperature

Gas: not determined

Decomposition temperature: not determined

Oxidizing properties

none

Vapour pressure: not determined

Density: not determined

Bulk density: 300-500 kg/m³

Water solubility: not miscible

Solubility in other solvents

not determined

Partition coefficient n-octanol/water:

SECTION 12: Ecological information

Viscosity / dynamic: not determined

Viscosity / kinematic: not determined

Flow time: not determined

Relative vapour density: not determined

Evaporation rate: not determined

Solvent separation test: not determined

Solvent content: not determined

Other information

Solid content: not determined

10. Stability and reactivity

Reactivity

No information available.

Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions

Refer to chapter 10.5.

Conditions to avoid

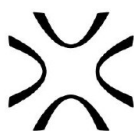
Protect against: UV-radiation/sunlight. heat.

Incompatible materials

Materials to avoid: Oxidizing agents, strong. Reducing agents, strong.

Hazardous decomposition products

Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxides (NO_x). Can be



released in case of fire: Carbon dioxide (CO₂). Carbon monoxide. Nitrogen oxides (NO_x). Hydrogen cyanide (hydrocyanic acid)

11. Toxicological information

Information on toxicological effects

Toxicokinetics, metabolism and distribution

No data available.

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix tested

	Dose	Species	Source
LD50, oral	>5000 mg/kg	Rat	

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitizing effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

No data available.

Name of toxicologically synergistic products

No data available

12. Ecological information

Ecotoxicity

The product has not been tested.

Persistence and degradability

The product has not been tested.

Bioaccumulative potential

No indication of bioaccumulation potential.

Mobility in soil

No data available.

Other adverse effects

No data available.

Further information

Do not allow to enter into surface water or drains.



13. Disposal considerations

Waste treatment methods

Disposal recommendations

Observe in addition any national regulations! Consult the local waste disposal expert about waste disposal.
Non-contaminated packages may be recycled.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

14. Transport information

Canadian TDG

Proper shipping name: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

UN number: No dangerous good in sense of this transport regulation.

United Nations proper shipping name: No dangerous good in sense of this transport regulation.

Transport hazard class(es): No dangerous good in sense of this transport regulation.

Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

UN number: No dangerous good in sense of this transport regulation.

United Nations proper shipping name: No dangerous good in sense of this transport regulation.

Transport hazard class(es): No dangerous good in sense of this transport regulation.

Packing group: No dangerous good in sense of this transport regulation.

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

15. Regulatory information

Canadian regulations

DSL/NDSL inventory status

The main component is a polymer and not listed in DSL/NDSL

National Pollutant Release Inventory (NPRI)

not listed.

WHMIS classification

No data available

Provincial regulations

No data available

16. Other information

Changes

Rev. 1.0; Initial release: 29.10.2021



Abbreviations and acronyms

ACGIH: American Conference of Governmental Industrial Hygienists
ASTM: American Society for Testing and Materials.
ATE: acute toxicity estimate
BCF: Bio concentration factor
CAS: Chemical Abstracts Service
d: days
DSL: Domestic Substance List
EC50: Half maximal effective concentration
EN: European Norm
ECHA: European Chemicals Agency
EPA: Environmental Protection Agency
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
h: hours
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER
IBC: Intermediate Bulk Container
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
LOAEL: Lowest observed adverse effect level
LOAEC: Lowest observed adverse effect concentration
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
MARPOL: marine pollution
NOAEL: No observed adverse effect level
NOAEC: No observed adverse effect concentration
NTP: National Toxicology Program
N/A: not applicable
NDSL: Non-Domestic Substance List
OECD: Organisation for Economic Co-operation and Development
OSHA: Occupational Safety and Health Administration
PBT: Persistent bioaccumulative toxic
RTECS: Registry of Toxic Effects of Chemical Substances
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
SIMDUT: Système d'information sur les matières dangereuses utilisées au travail
STEL: short-term exposure limits
TDG: Transportation of Dangerous Goods
TWA: time weighted average
TWAEV: TIME-WEIGHTED AVERAGE EXPOSURE VALUE
VOC: Volatile Organic Compounds
WHMIS: Workplace Hazardous Materials Information System

Further Information

Classification according WHMIS 2015 (GHS): - Classification procedure:
Health hazards: Calculation method.
Environmental hazards: Calculation method.
Physical hazards: On basis of test data and / or calculated. and / or estimated.



Safety Data Sheet
FLEXA SOFT

Sinterit Sp. z o. o.

Revision date: 29.10.2021

Print date: 01.11.2021
according to WHMIS

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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)