SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: ELIX ABS Pellets (Polycarbonate-modified)

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

General use: For the production of moulded plastic articles
Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company name: ELIX Polymers, S.L.
Street/POB-No.: Polígono Industrial
Ctra. de Vilaseca - La Pineda
Postal Code, city: 43006 Tarragona, Spain
Spain
WWW: www.elix-polymers.com
E-mail: info@elix-polymers.com
Telephone: +34-977-835400
Department responsible for information:
Telephone: +34-977-835476, E-mail info@elix-polymers.com
Additional information: This safety data sheet pertains to all the products listed in chapter 16.

1.4 Emergency telephone number

Telephone: +1 760 476 3961

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

This mixture is classified as not hazardous.

2.2 Label elements

Labelling (CLP)

Hazard statements: not applicable

Precautionary statements: not applicable

2.3 Other hazards

Under the recommended processing conditions small amounts of emitted substance (e.g. residual monomers, residual solvents, decomposition products) may be discharged. In succession of overheating during the melting process potentially substances are released, which are considered as harmful and carcinogen. The maximum workplace exposure limits are, where necessary, listed in section 8.

The melted product can cause severe burns.
In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

No data available

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: A blend of polymers based on acrylonitrile butadiene styrene/bisphenol A - polycarbonate copolymer

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: Take off contaminated clothing and wash it before reuse.

In case of inhalation: In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. In case of breathing difficulties administer oxygen. If breathing has stopped, give artificial respiration immediately. Seek medical attention.

Following skin contact: After contact with molten product, cool skin area rapidly with cold water. Do not use force or solvents to remove product incrustations from affected skin areas. Cover wounds with sterile dressing. Seek medical attention.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In case of troubles or persistent symptoms, consult an opthalmologist.

After swallowing: Rinse mouth with water. Drink one or two glasses of water.
Never give an unconscious person anything through the mouth. seek medical attention

4.2 Most important symptoms and effects, both acute and delayed

The melted product can cause severe burns.
Thermal treatment, Processing: Can cause skin, eye and respiratory tract irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water spray jet, foam, dry extinguishing powder, carbon dioxide.

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated:
Chlorine compounds, nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus. Suitable protective clothing.

Additional information: Seal off endangered area. Remove persons to safety.
Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep the molten mass away from the eyes and the skin.
Where there is a risk of exothermal decomposition as a result of overheating (rise in temperature, formation of fumes or smoke), cool the melt in a water bath. Do not breathe vapours. Provide adequate ventilation. Provide a conveniently located respiratory protective device. Take off contaminated clothing and wash it before reuse.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

Take up mechanically.

Additional information: Granulate: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: In case of melting: To avoid thermal decomposition, do not overheat.
Make sure there is sufficient air exchange and / or that working rooms are air suctioned.
Avoid exceeding WEL threshold levels. Do not breathe vapours.
After work, wash hands and face. Take off contaminated clothing and wash it before reuse.

For mechanical processing:
Do not breathe dust. Vent dust from the work area.
Avoid dust formation during regranulation.

Precautions against fire and explosion:

In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container dry. Store only in original container.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
100-41-4	Ethylbenzene	Europe: IOELV: STEL	884 mg/m³; 200 ppm (may be absorbed through the skin)
		Europe: IOELV: TWA	442 mg/m³; 100 ppm (may be absorbed through the skin)
106-99-0	1,3-Butadiene	Europe: BOELV: TWA	2.2 mg/m³; 1 ppm
108-95-2	Phenol	Europe: IOELV: STEL	16 mg/m³; 4 ppm (may be absorbed through the skin)
		Europe: IOELV: TWA	8 mg/m³; 2 ppm (may be absorbed through the skin)
80-05-7	Bisphenol A (4,4'-Isopropylidenediphenol)	Europe: BOELV: TWA	2 mg/m³ (inhalable fraction)
108-90-7	Chlorobenzene	Europe: IOELV: STEL	70 mg/m³; 15 ppm
		Europe: IOELV: TWA	23 mg/m³; 5 ppm

Biological limit values:

CAS No.	Designation	Type	Limit value	Parameter	Sampling
108-95-2	Phenol	Europe: BLV, urine	120 mg/g creatinine	phenol	no restriction

Additional information:

Information about acrylonitrile and butadiene: carcinogenic effect.
Additional protective measures:
- Measurements for the early detection of increased exposure as a result of an unforeseen incident;
- The danger areas must be delimited and identified using relevant warning and safety signs. Smoking is forbidden.
- The exhaust air must only be let back to the working area after sufficient cleaning using approved equipment.

8.2 Exposure controls

In case of melting:
Provide for good ventilation or exhaust system or work with completely self-contained equipment.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded.
Use filter type A-P2 according to EN 14387.

Hand protection: Protective gloves according to EN ISO 374-1.
Protective gloves made of fabric or leather.
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

In case of melting: Impervious heat protective gloves according to EN 407
Glove material: Leather
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN ISO 16321-1.

Body protection: Wear suitable protective clothing.
In case of dust formation: Overall

General protection and hygiene measures:

Take off contaminated clothing and wash it before reuse.
Wash contaminated clothing prior to re-use.
When using do not eat, drink or smoke.
Wash hands before breaks and after work.
Safety shower and eye wash station should be easily accessible to the work area.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	solid Form: granulate
Colour:	varying, depends on colouring
Odour:	characteristic
Melting point/freezing point:	(Softening temperature: 100 - 115 °C) 100 - 115 °C
Boiling point:	No data available
Flammability:	No data available
Lower and upper explosion limit:	Not applicable
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	> 300 °C
pH:	Not applicable

Kinematic viscosity:	Not applicable
Water solubility:	insoluble
Partition coefficient n-octanol/water (log value):	No data available
Vapour pressure:	No data available
Density:	No data available
Relative vapour density:	Not applicable
Particle characteristics:	No data available

9.2 Other information

Explosive properties:	In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Bulk density:	500 - 700 kg/m³
Additional information:	Softening temperature: 100 - 115 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

exothermic reactions

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

In case of dust formation (Fine dust): May form explosible dust-air mixture if dispersed.

10.4 Conditions to avoid

Heating (Decomposition).

10.5 Incompatible materials

none

10.6 Hazardous decomposition products

When greatly overheated, material may release hazardous decomposition products: Hydrogen cyanide, monomers, hydrocarbons, gases/vapours, cyclic low molecular weight oligomers, carbon monoxide and carbon dioxide.

Thermal decomposition: > 300 °C

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects:

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Lack of data.

Serious eye damage/irritation: Lack of data.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

11.2 Information on other hazards

Endocrine disrupting properties:

No data available

Other information:

There are no known health risks.
Under the recommended processing conditions small amounts of emitted substance (e.g. residual monomers, residual solvents, decomposition products) may be discharged. In succession of overheating during the melting process potentially substances are released, which are considered as harmful and carcinogen.

The melted product can cause severe burns.
Thermal treatment, Processing: Can cause skin, eye and respiratory tract irritation.

Symptoms

The melted product can cause severe burns.
Thermal treatment, Processing: Can cause skin, eye and respiratory tract irritation.

SECTION 12: Ecological information

12.1 Toxicity

Further details:

No data available

12.2 Persistence and degradability

Further details:

Product is not readily biodegradable.
Due to the consistency along with the low water solubility of the product a bioavailability is unlikely.

12.3 Bioaccumulative potential

To avoid bioaccumulation plastics should not be disposed in the sea or in other water environments.

Partition coefficient: n-octanol/water:

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

General information: Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 07 02 13 = Waste plastic

Recommendation: Recycling or special waste incineration.
After appropriate treatment the product can be remelted and reprocessed into new moulded articles. Mechanical recycling is only possible if the material has been selectively retrieved and carefully segregated according to type.

Package

Recommendation: Non-contaminated packages may be recycled. If recycling is not practicable, dispose of in compliance with local regulations.

Section 14. Transport information

14.1 UN number or ID number

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR:

Not restricted

14.3 Transport hazard class(es)

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.4 Packing group

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Dangerous for the environment:

Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant - IMDG: no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

National regulations - EC member states

Further regulations, limitations and legal requirements:

No data available

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

This safety data sheet pertains to the following products:
ELIX ABS H801
ELIX ULTRA 4105
ELIX ULTRA E-LOOP 4105 MR
ELIX ABS E-LOOP H801 MR

Reason of change: Changes in section 1: E-mail
Date of first version: 26/9/2011

Department issuing data sheet:

see section 1: Department responsible for information

Abbreviations and acronyms:

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
AS/NZS: Australian Standards/New Zealand Standards
CAS: Chemical Abstracts Service
CFR: Code of Federal Regulations
CLP: Classification, Labelling and Packaging
DMEL: Derived minimal effect level
DNEL: Derived no-effect level
EC: European Community
EmS: Emergency Response Procedures for Ships Carrying Dangerous Goods
EN: European Standard
EQ: Excepted quantities
EU: European Union
IATA: International Air Transport Association
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IMDG Code: International Maritime Dangerous Goods Code
IMO: International Maritime Organization
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
OEL: Occupational Exposure Limit Value
OSHA: Occupational Safety and Health Administration
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted no-effect concentration
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
TLV: Threshold Limit Value
TRGS: Technical Rules for Hazardous Substances
vPvB: Very persistent and very bioaccumulative
WEL: Workplace Exposure Limit

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.