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

- **Product identifier**
- **Trade name**: TCO22-15
- **CAS Number**: 65997-17-3
- **EINECS Number**: 266-046-0

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

**Application of the substance / the preparation** Transparent Conducting Oxide Coated Glass

**Details of the supplier of the safety data sheet**

- **Manufacturer/Supplier**: SOLARONIX SA
  Rue de l'Ouriette 129, CH-1170 Aubonne, Switzerland
  info@solaronix.com
  T +41 21 821 22 80
  www.solaronix.com
  F +41 21 821 22 89
  info@solaronix.com

- **Emergency telephone number**: Swiss Toxicological Information Center: +41 44 251 51 51

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  The substance is not classified according to the CLP regulation.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  Not applicable.
- **Information concerning particular hazards for human and environment**: Not applicable.

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Other hazards**
- **Results of PBT and vPvB assessment**
  - PBT: Not applicable.
  - vPvB: Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Substances**
- **CAS No. Description**: 65997-17-3 Fibrous Glass
- **Identification number(s)**
- **EINECS Number**: 266-046-0

**Additional information**: TCO22-15 is a 2.2 mm thick sodalime glass coated on one side with a conductive fluorine doped tin oxide layer, having a sheet resistivity of 15 Ω/sq.

(Contd. on page 2)
4 First aid measures

- Description of first aid measures
  - General information: No special measures required.
  - After excessive inhalation: Supply fresh air; consult a doctor in case of complaints.
  - After skin contact: Generally the product does not irritate the skin.
  - After eye contact: Rinse opened eye for several minutes under running water.
  - After swallowing: If symptoms persist consult a doctor.
- Information for doctor:
  - Most important symptoms and effects, both acute and delayed
    No further relevant information available.
  - Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Firefighting measures

- Suitable extinguishing agents:
  CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture
  No further relevant information available.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  Mount respiratory protective device.
- Environmental precautions: No special measures required.
- Methods and material for containment and cleaning up: Pick up mechanically.
- Reference to other sections
  No dangerous substances are released.
  See Section 7 for information on safe handling.
  See Section 8 for information on personal protective equipment.
  See Section 13 for disposal information.

7 Handling and storage

- Handling:
  - Precautions for safe handling No special measures required.
  - Information about fire - and explosion protection: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.
8 Exposure controls/personal protection

· Additional information about design of technical facilities: No further data; see section 7.

· Control parameters
· Ingredients with limit values that require monitoring at the workplace: Not required.
· Additional information:
  As a basis for the production of this document, the most current valid lists were used.

· Exposure controls
· Personal protective equipment:
· General protective and hygienic measures:
  The usual precautionary measures are to be adhered to when handling chemicals.
· Respiratory protection:
  In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
· Protection of hands:

  Protective gloves

· Gloves material:
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Eye protection:

  Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and chemical properties
· General Information
· Appearance:
  · Form: Solid
  · Colour: Colourless
· Odour:
· Odour threshold:
· pH-value:
· Change in condition
  · Melting point/Melting range: Undetermined.
  · Boiling point/Boiling range: Undetermined.
· Flash point:
· Flammability (solid, gaseous):
· Ignition temperature:
· Decomposition temperature:
Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 01.05.2011
Version number 1
Revision: 01.05.2011

Trade name: TCO22-15

(Contd. of page 3)

- **Self-igniting:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
  - **Lower:** Not determined.
  - **Upper:** Not determined.
- **Vapour pressure:** Not applicable.
- **Density at 20°C:** 2.45 g/cm³
  - **Relative density:** Not determined.
  - **Vapour density:** Not applicable.
  - **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with water:** Insoluble.
- **Segregation coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
  - **Dynamic:** Not applicable.
  - **Kinematic:** Not applicable.
- **Solvent content:**
  - **Organic solvents:** 0.0 %
    - **VOC (EC):** 0.00 %
- **Solids content:** 100.0 %
  - **Other information:** No further relevant information available.

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
  - No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
  - **Primary irritant effect:**
    - **On the skin:** No irritant effect.
    - **On the eye:** No irritant effect.
  - **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
  - When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

(Contd. on page 5)
Trade name: **TCO22-15**

(Contd. of page 4)

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
  - **Bioaccumulative potential** No further relevant information available.
  - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
  - **General notes:** Generally not hazardous for water.
  - **Results of PBT and vPvB assessment**
    - **PBT:** Not applicable.
    - **vPvB:** Not applicable.
  - **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
  - **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
  - **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

- **Land transport ADR/RID (cross-border):**
  - **ADR/RID class:** -
- **Maritime transport IMDG:**
  - **IMDG Class:** Classe : Cannot be considered as being part of the 4.3 classification (*)
  - **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
  - **ICAO/IATA Class:** Classe : Cannot be considered as being part of the 4.3 classification (*)
- **UN "Model Regulation":** -
  - **Special precautions for user** Not applicable.
  - **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

**15 Regulatory information**

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
Trade name: **TCO22-15**

**Abbreviations and acronyms:**

- **ADR**: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- **RID**: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- **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
- **EINECS**: European Inventory of Existing Commercial Chemical Substances
- **CAS**: Chemical Abstracts Service (division of the American Chemical Society)
- **VOC**: Volatile Organic Compounds (USA, EU)