

Safety Data Sheet

Indium Tin Oxide (ITO)

Revision Date: 2/23/2016

Date Issued: 8/6/2018

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

Product name	Indium Tin Oxide (ITO)
Product code	NO-0045
CAS	50926-11-9
REACH No. :	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
Identified uses	Laboratory chemicals, Manufacture of substances
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D – 74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Emergency telephone	+49 (0)176-84850874
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULTATION (EC) No 1272/2008)

Skin corrosion/irritation, Category 2, H315

Serious eye damage/Eye irritation, Category 2, H319

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation, Category 3, H335

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Classification (67/548/EEC or 1999/45/EC)

Harmful by inhalation. Irritating to eyes, respiratory system and skin.

Supplemental Hazard Statements none

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008, GHS)

Pictogram



Signal word

Warning

Hazard statement(s)

H319

Causes serious eye irritation.

H332

Harmful if inhaled.

H335

May cause respiratory irritation.

Precautionary statement(s)

P261

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray .

P280

Wear protectic gloves/protective clothing/eye protection/face protection .

P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Caution! Substance not yet fully tested!

Labelling (67/548/EEC or 1999/45/EC)

Hazard symbol(s)



R-phrase(s)

R20

Harmful by inhalation.

R36/37/38

Irritating to eyes, respiratory system and skin.

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S-phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36 Wear suitable protective clothing.

Caution! Substance not yet fully tested!

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	Contents	Health(Class)	Risk(R/No.)
Indium Tin Oxide (ITO)	99.99%		Substance not yet fully tested!
Indium Oxide: 90%/Tin Oxide: 10%			

4 FIRST AID MEASURES

General	Contaminated clothing should be removed and washed before being reused.
Inhalation	Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen.
Ingestion	Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention immediately.
Skin	Wash the skin immediately with soap and water.
Eyes	Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

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5 FIRE FIGHTING MEASURES

Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide, appropriate to surrounding fire conditions.

Protective measures in fire

Wear self contained breathing apparatus for fire fighting if necessary.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions during spill

Wear protective clothing and avoid inhalation of powder, fume and vapor as well as skin or eye contact.

Precautions to protect environment

Avoid washing into water courses. Avoid contaminating public drains or water supply.

Spill cleanup methods

Avoid contact with skin or inhalation of spillage, dust or vapour, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate.

7 HANDLING AND STORAGE

Handling precautions

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

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Storage precautions

Keep container tightly closed. Store in a cool, dry place.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Solid

Color

yellow

SG/Density

1.200 g/cm³ at 20°C

Solubility

Insoluble in water

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10 STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Conditions/materials to avoid	Strong oxidizing agents, Potassium, Strong acids, Aluminum, Sodium/sodium oxides, Magnesium
Hazardous Decomposition	Hazardous decomposition products formed under fire conditions. - Tin/tin oxides, Indium/indium oxides

11 TOXICOLOGICAL INFORMATION

Acute toxicity

no data available

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

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Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

Ingestion

May be harmful if swallowed.

Inhalation

May be harmful if inhaled.

Skin

May causes irritation

Eyes

May causes irritation

Additional Information

RTECS: Not available

Full Data on the toxicity of this product are not available. Hazardous properties cannot be excluded.

12 ECOLOGICAL INFORMATION

Do not allow material to be released to the environment without proper governmental permits.

13 DISPOSAL CONSIDERATIONS

Disposal method

Contact specialist disposal companies. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

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14 TRANSPORT INFORMATION

General	Not classified as dangerous for transport purposes.
Road transport notes	Not classified as dangerous for road transport.
Rail transport notes	Not classified as dangerous for rail transport.
Sea transport notes	Not classified as dangerous for sea transport.
Air transport notes	Not classified as dangerous for air transport.

15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

Chemical Safety Assessment

no data available

Country specific information:

Germany

WGK 1 (self classification) – Not hazardous to water.

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16 OTHER INFORMATION

DISCLAIMER

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