

# SAFETY DATA SHEET

## T1333 Sn40 Pb60 125g

### 1. Identification of the preparation and of the company

**Product name** : T1333 Sn40 Pb60  
125g

**Code** : 51930

**Head Office** : **Solder Connection LTD**  
**Unit 5, Severn Link Distribution Centre**  
**Chepstow, Monmouthshire**  
**NP16 6UN**

**Telephone** : **+44(0) 1291 624400**

**Email** : **sales@solderconnection.co.uk**

**Website** : **www.solderconnection.com**

**Material uses** : soldering

### 2 Hazards identification

The preparation is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Repr. Cat. 1; R61  
Repr. Cat. 3; R62  
Xn; R20/22  
C; R34  
R33  
N; R50/53

#### Effects and symptoms

##### **Inhalation**

Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterised by burning, sneezing and coughing. Over-exposure by inhalation may cause respiratory irritation.

##### **Ingestion**

May cause burns to mouth, throat and stomach.

##### **Skin contact**

Hazardous by the following route of exposure: of skin contact (corrosive).

##### **Eye contact**

Hazardous by the following route of exposure: of eye contact (corrosive).

##### **Toxicity data**

**lead**: Warning. Contains lead.  
Over-exposure signs/symptoms:- blood formation impairment, central nervous system depression  
May cause harm to the unborn child.  
Repeated or prolonged exposure to the substance can produce reproductive system damage.

See section 11 for more detailed information on health effects and symptoms.

### 3 Composition/information on ingredients

**Substance/preparation** : Preparation

Ingredient name	CAS number	%	EC number	Classification
Europe				

**Date of issue** : 26/03/2012.

### 3 Composition/information on ingredients

lead	7439-92-1	40 - 60	231-100-4	Repr. Cat. 1; R61 Repr. Cat. 3; R62 Xn; R20/22 R33 N; R50/53
tin	7440-31-5	20 - 30	231-141-8	Not classified.
zinc chloride	7646-85-7	10 - 15	231-592-0	Xn; R22 C; R34 N; R50/53
antimony	7440-36-0	1 - 5	231-146-5	Xn; R20/22 N; R51/53
<b>See section 16 for the full text of the R-phrases declared above</b>				

\* Occupational Exposure Limit(s), if available, are listed in Section 8

\* The classifications listed, indicate the potential hazards of the ingredients

### 4. First-aid measures

#### First-aid measures

- Inhalation** : Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately.
- Ingestion** : Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Get medical attention immediately. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

See section 11 for more detailed information on health effects and symptoms.

### 5. Fire-fighting measures

#### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : No specific fire or explosion hazard.

## 5. Fire-fighting measures

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous combustion products** : Decomposition products may include the following materials:  
halogenated compounds  
metal oxide/oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

- Personal precautions** : Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Put on appropriate personal protective equipment (see section 8).
- Environmental precautions** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
- Large spill** : Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.
- Small spill** : Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

## 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Refer to special instructions/safety data sheet. Use only with adequate ventilation. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.
- Packaging materials**
- Recommended** : Use original container.

## 8. Exposure controls/personal protection

### Exposure limit values

<u>Ingredient name</u>	<u>Occupational exposure limits</u>
<b>Europe</b>	
lead	<b>EU OEL (Europe, 5/2006). Notes: Binding</b> 8 hours: 0.15 mg/m <sup>3</sup> 8 hour(s).
tin	<b>ACGIH TLV (United States, 1/2006).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s).
zinc chloride	<b>ACGIH TLV (United States, 1/2006).</b> STEL: 2 mg/m <sup>3</sup> 15 minute(s). Form: Fume TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: Fume
antimony	<b>ACGIH TLV (United States, 1/2006). Notes: as Sb</b> TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 8 hour(s).
<b>Sweden</b>	

**Date of issue** : 26/03/2012.

## 8. Exposure controls/personal protection

lead	<b>AFS (Sweden, 6/2005).</b> TWA: 0.05 mg/m <sup>3</sup> 8 hour(s). Form: respirable dust TWA: 0.1 mg/m <sup>3</sup> 8 hour(s). Form: total dust
zinc chloride	<b>AFS (Sweden, 6/2005).</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: respirable dust
antimony	<b>AFS (Sweden, 6/2005).</b> TWA: 0.5 mg/m <sup>3</sup> 8 hour(s). Form: total dust
<b>Denmark</b>	
lead	<b>Arbejdstilsynet (Denmark, 4/2005). Notes: Calculated as Pb</b> TWA: 0.05 mg/m <sup>3</sup> , (Calculated as Pb) 8 hour(s). Form: Powder, dust and fumes
zinc chloride	<b>Arbejdstilsynet (Denmark, 4/2005). Notes: Calculated as Zn</b> TWA: 0.5 mg/m <sup>3</sup> , (Calculated as Zn) 8 hour(s). TWA: 0.5 mg/m <sup>3</sup> , (Calculated as Zn) 8 hour(s). Form: Fume
antimony	<b>Arbejdstilsynet (Denmark, 4/2005). Notes: Calculated as Sb</b> TWA: 0.5 mg/m <sup>3</sup> , (Calculated as Sb) 8 hour(s). Form: Powder
<b>Norway</b>	
lead	<b>Arbejdstilsynet (Norway, 10/2003). Notes: Calculated as Pb</b> TWA: 0.05 mg/m <sup>3</sup> , (Calculated as Pb) 8 hour(s). Form: Dust and fumes
zinc chloride	<b>Arbejdstilsynet (Norway, 10/2003).</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s).
antimony	<b>Arbejdstilsynet (Norway, 10/2003).</b> TWA: 0.5 mg/m <sup>3</sup> 8 hour(s).
<b>France</b>	
lead	<b>INRS (France, 6/2006). Notes: Regulatory binding exposure limits</b> TWA: 0.1 mg/m <sup>3</sup> 8 hour(s).
zinc chloride	<b>INRS (France, 6/2006). Notes: indicative exposure limits</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: Fume
antimony	<b>INRS (France, 6/2006). Notes: indicative exposure limits</b> TWA: 0.5 mg/m <sup>3</sup> 8 hour(s).
<b>Netherlands</b>	
lead	<b>Nationale MAC-lijst (Netherlands, 7/2006). Notes: Legal indicates a statutory value, Administrative indicates an administrative value that is not legally binding (see background).</b> OEL, 8-h TWA: 0.15 mg/m <sup>3</sup> 8 hour(s). Form: respirable dust and fume
zinc chloride	<b>Nationale MAC-lijst (Netherlands, 7/2006). Notes: Administrative</b> OEL, 8-h TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: fume
antimony	<b>Nationale MAC-lijst (Netherlands, 7/2006). Notes: Administrative</b> OEL, 8-h TWA: 0.5 mg/m <sup>3</sup> 8 hour(s).
<b>Germany</b>	
lead	<b>EU OEL (Europe, 5/2006). Notes: Binding</b> 8 hours: 0.15 mg/m <sup>3</sup> 8 hour(s).
<b>Finland</b>	
lead	<b>EU OEL (Europe, 5/2006). Notes: Binding</b> 8 hours: 0.15 mg/m <sup>3</sup> 8 hour(s).
tin	<b>Työterveyslaitos (Finland, 2002).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s). <b>Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 4/2005). Notes: Calculated as Sn</b> TWA: 2 mg/m <sup>3</sup> , (Calculated as Sn) 8 hour(s).
zinc chloride	<b>Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 4/2005).</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: fume
antimony	<b>Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 4/2005). Notes: Calculated as Sb</b> TWA: 0.5 mg/m <sup>3</sup> , (Calculated as Sb) 8 hour(s).

## 8. Exposure controls/personal protection

### United Kingdom (UK)

lead	<b>EH40-OES (United Kingdom (UK), 2002).</b> TWA: 0.15 mg/m <sup>3</sup> 8 hour(s).
	<b>EH40-WEL (United Kingdom (UK), 9/2006).</b> WEL 8 hrs limit: 0.15 mg/m <sup>3</sup> 8 hour(s).
tin	<b>EH40-OES (United Kingdom (UK), 2002).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s). STEL: 4 mg/m <sup>3</sup> 15 minute(s).
zinc chloride	<b>EH40-WEL (United Kingdom (UK), 9/2006).</b> WEL 15 min limit: 2 mg/m <sup>3</sup> 15 minute(s). Form: Fume WEL 8 hrs limit: 1 mg/m <sup>3</sup> 8 hour(s). Form: Fume
antimony	<b>EH40-WEL (United Kingdom (UK), 9/2006). Notes: As Sb</b> WEL 8 hrs limit: 0.5 mg/m <sup>3</sup> , (As Sb) 8 hour(s).

### Austria

lead	<b>GKV_MAK (Austria, 6/2006).</b> STEL: 0.4 mg/m <sup>3</sup> , 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 0.1 mg/m <sup>3</sup> 8 hour(s). Form: Inhalable fraction
tin	<b>GKV_MAK (Austria, 6/2006).</b> STEL: 4 mg/m <sup>3</sup> , 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 2 mg/m <sup>3</sup> 8 hour(s). Form: Inhalable fraction
antimony	<b>GKV_MAK (Austria, 6/2006).</b> STEL: 5 mg/m <sup>3</sup> , 1 times per shift, 30 minute(s). Form: Inhalable fraction TWA: 0.5 mg/m <sup>3</sup> 8 hour(s). Form: Inhalable fraction

### Switzerland

lead	<b>EU OEL (Europe, 5/2006). Notes: Binding</b> 8 hours: 0.15 mg/m <sup>3</sup> 8 hour(s).
zinc chloride	<b>SUVA (Switzerland, 2/2005). Notes: not temporary</b> TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: respirable dust and fumes
antimony	<b>SUVA (Switzerland, 2/2005). Notes: not temporary</b> TWA: 0.5 mg/m <sup>3</sup> 8 hour(s). Form: inhalable dust

### Belgium

lead	<b>Lijst Grenswaarden / Valeurs Limites (Belgium, 3/2006). Notes: As Pb</b> TWA: 0.15 mg/m <sup>3</sup> , (As Pb) 8 hour(s). Form: dust and fumes
tin	<b>Lijst Grenswaarden / Valeurs Limites (Belgium, 3/2006). Skin</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s).
zinc chloride	<b>Lijst Grenswaarden / Valeurs Limites (Belgium, 3/2006).</b> STEL: 2 mg/m <sup>3</sup> 15 minute(s). Form: fume TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: fume
antimony	<b>Lijst Grenswaarden / Valeurs Limites (Belgium, 3/2006).</b> TWA: 0.5 mg/m <sup>3</sup> 8 hour(s).

### Spain

lead	<b>INSHT (Spain, 1/2006).</b> TWA: 0.15 mg/m <sup>3</sup> 8 hour(s).
tin	<b>INSHT (Spain, 1/2006).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s).
zinc chloride	<b>INSHT (Spain, 1/2006).</b> STEL: 2 mg/m <sup>3</sup> 15 minute(s). Form: Fume TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: Fume
antimony	<b>INSHT (Spain, 1/2006).</b> TWA: 0.5 mg/m <sup>3</sup> 8 hour(s).

### Turkey

lead	<b>EU OEL (Europe, 5/2006). Notes: Binding</b> 8 hours: 0.15 mg/m <sup>3</sup> 8 hour(s).
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### Czech Republic

## 8. Exposure controls/personal protection

lead	<b>178/2001 (Czech Republic, 6/2004).</b> STEL: 0.2 mg/m <sup>3</sup> 10 minute(s). TWA: 0.05 mg/m <sup>3</sup> 8 hour(s).
zinc chloride	<b>178/2001 (Czech Republic, 6/2004).</b> STEL: 2 mg/m <sup>3</sup> 10 minute(s). TWA: 1 mg/m <sup>3</sup> 8 hour(s).
antimony	<b>178/2001 (Czech Republic, 6/2004). Notes: as Sb</b> STEL: 1.5 mg/m <sup>3</sup> , (as Sb) 10 minute(s). TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 8 hour(s).
<b>Ireland</b>	
lead	<b>NAOSH (Ireland, 3/2002).</b> OELV-8hr: 0.15 mg/m <sup>3</sup> 8 hour(s).
zinc chloride	<b>NAOSH (Ireland, 3/2002).</b> OELV-15min: 2 mg/m <sup>3</sup> 15 minute(s). Form: Fume OELV-8hr: 1 mg/m <sup>3</sup> 8 hour(s). Form: Fume
antimony	<b>NAOSH (Ireland, 3/2002).</b> OELV-8hr: 0.5 mg/m <sup>3</sup> 8 hour(s).
<b>Italy</b>	
lead	<b>Ministero della Salute (Italy, 3/2004).</b> TWA: 0.15 mg/m <sup>3</sup> 8 hour(s).
<b>Estonia</b>	
lead	<b>Sotsiaalminister (Estonia, 9/2001).</b> TWA: 0.05 MG/M3 8 hour(s). Form: inhalable dust
zinc chloride	TWA: 0.1 MG/M3 8 hour(s). Form: total dust <b>Sotsiaalminister (Estonia, 9/2001).</b> TWA: 1 MG/M3 8 hour(s). Form: inhalable dust
antimony	<b>Sotsiaalminister (Estonia, 9/2001).</b> TWA: 0.5 MG/M3 8 hour(s).
<b>Lithuania</b>	
lead	<b>Del Lietuvos Higienos Normos (Lithuania, 12/2001).</b> TWA: 0.15 MG/M3 8 hour(s). Form: Inhalable fraction
zinc chloride	TWA: 0.07 MG/M3 8 hour(s). Form: Respirable fraction <b>Del Lietuvos Higienos Normos (Lithuania, 12/2001).</b> TWA: 1 MG/M3 8 hour(s). Form: Respirable fraction
antimony	<b>Del Lietuvos Higienos Normos (Lithuania, 12/2001).</b> TWA: 0.5 MG/M3 8 hour(s).
<b>Slovakia</b>	
lead	<b>Nariadenie vlády Slovenskej republiky (Slovakia, 5/2006).</b> TWA: 0.15 mg/m <sup>3</sup> 8 hour(s).
antimony	<b>Nariadenie vlády Slovenskej republiky (Slovakia, 5/2006).</b> CEIL: 1 mg/m <sup>3</sup> Form: total dust TWA: 0.5 mg/m <sup>3</sup> 8 hour(s). Form: total dust
<b>Hungary</b>	
lead	<b>EüM-SzCsM (Hungary, 11/2002). Notes: as Pb</b> PEAK: 0.6 mg/m <sup>3</sup> , (as Pb) 15 minute(s). PEAK: 0.2 mg/m <sup>3</sup> , (as Pb) 15 minute(s). Form: Respirable TWA: 0.15 mg/m <sup>3</sup> , (as Pb) 8 hour(s). TWA: 0.05 mg/m <sup>3</sup> , (as Pb) 8 hour(s). Form: Respirable
antimony	<b>EüM-SzCsM (Hungary, 11/2002). Notes: as Sb</b> PEAK: 2 mg/m <sup>3</sup> , (as Sb) 15 minute(s). TWA: 0.5 mg/m <sup>3</sup> , (as Sb) 8 hour(s).
<b>Poland</b>	
lead	<b>Ministra Pracy i Polityki Społecznej (Poland, 10/2005). Notes: Calculated as Pb</b> TWA: 0.05 mg/m <sup>3</sup> , (Calculated as Pb) 8 hour(s).
tin	<b>Ministra Pracy i Polityki Społecznej (Poland, 10/2005). Notes: Calculated as Sn</b> TWA: 2 mg/m <sup>3</sup> , (Calculated as Sn) 8 hour(s). Form: smokes and dusts

## 8. Exposure controls/personal protection

zinc chloride	<b>Ministra Pracy I Polityki Społecznej (Poland, 10/2005).</b> STEL: 2 mg/m <sup>3</sup> 15 minute(s). Form: smokes TWA: 1 mg/m <sup>3</sup> 8 hour(s). Form: smokes
antimony	<b>Ministra Pracy I Polityki Społecznej (Poland, 10/2005). Notes: Calculated as Sb</b> STEL: 1.5 mg/m <sup>3</sup> , (Calculated as Sb) 15 minute(s). TWA: 0.5 mg/m <sup>3</sup> , (Calculated as Sb) 8 hour(s).
<b>Slovenia</b>	
lead	<b>Uradni list Republike Slovenije (Slovenia, 4/2005).</b> PEAK: 0.4 MG/M3, 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 0.1 MG/M3 8 hour(s). Form: Inhalable fraction
antimony	<b>Uradni list Republike Slovenije (Slovenia, 4/2005).</b> PEAK: 2 MG/M3, 4 times per shift, 15 minute(s). Form: Inhalable fraction TWA: 0.5 MG/M3 8 hour(s). Form: Inhalable fraction
<b>Latvia</b>	
lead	<b>LV Nat. Standardisation and Meterological Centre (Latvia, 11/2004).</b> STEL: 0.01 MG/M3 15 minute(s). TWA: 0.005 MG/M3 8 hour(s).
antimony	<b>LV Nat. Standardisation and Meterological Centre (Latvia, 11/2004).</b> STEL: 0.5 MG/M3 15 minute(s). Form: Dust TWA: 0.2 MG/M3 8 hour(s). Form: Dust
<b>Greece</b>	
lead	<b>PD 90/1999 (Greece, 2/2003).</b> TWA: 0.15 MG/M3 8 hour(s).
tin	<b>PD 90/1999 (Greece, 2/2003).</b> TWA: 2 MG/M3 8 hour(s).
zinc chloride	<b>PD 90/1999 (Greece, 2/2003).</b> STEL: 2 MG/M3 15 minute(s). TWA: 1 MG/M3 8 hour(s).
antimony	<b>PD 90/1999 (Greece, 2/2003).</b> TWA: 0.5 MG/M3 8 hour(s).
<b>Portugal</b>	
lead	<b>Instituto Português da Qualidade (Portugal, 7/2004).</b> TWA: 0.05 MG/M3 8 hour(s).
tin	<b>Instituto Português da Qualidade (Portugal, 7/2004).</b> TWA: 2 MG/M3 8 hour(s).
zinc chloride	<b>Instituto Português da Qualidade (Portugal, 7/2004).</b> STEL: 2 MG/M3 15 minute(s). Form: Fume TWA: 1 MG/M3 8 hour(s). Form: Fume
antimony	<b>Instituto Português da Qualidade (Portugal, 7/2004).</b> TWA: 0.5 MG/M3 8 hour(s).

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

### Exposure controls

**Occupational exposure controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

## 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Respiratory protection** : Recommended:None assigned.
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.  
<1 hours (breakthrough time): disposable vinyl
- Eye protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.  
Recommended: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.
- Skin protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.  
Recommended: overall
- 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.

## 9. Physical and chemical properties

### General information

#### Appearance

- Physical state** : Solid.
- Colour** : Grey.

### Important health, safety and environmental information

- Melting point** : 183 to 238°C (361.4 to 460.4°F)
- Solubility** : Very slightly soluble in the following materials: cold water and hot water.

## 10. Stability and reactivity

- Stability** : The product is stable. Under normal conditions of storage and use, hazardous polymerisation will not occur.
- Conditions to avoid** : Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Avoid release to the environment. Refer to special instructions/safety data sheet.
- Materials to avoid** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11. Toxicological information

### Potential acute health effects

- Inhalation** : Harmful by inhalation. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Ingestion** : Harmful if swallowed. May cause burns to mouth, throat and stomach.
- Skin contact** : Corrosive to the skin. Causes burns.
- Eye contact** : Corrosive to eyes. Causes burns.

### Acute toxicity

### Over-exposure signs/symptoms



## 11. Toxicological information

**Target organs** : Contains material which causes damage to the following organs: blood, kidneys, lungs, gastrointestinal tract, cardiovascular system, upper respiratory tract, skin, central nervous system (CNS), eye, lens or cornea.

Product name	List name	Name on list	Classification	Notes
<b>United Kingdom (UK)</b>				
lead	UK Occupational Exposure Limits EH40 WEL	lead	Carc. Carc	
<b>Netherlands</b>				
lead		lood Metallisch	Repro. fertility category 3	
<b>Germany</b>				
lead	Germany TRGS905	Blei Metall, bioverfügbar	RF3	
<b>France</b>				
lead	France Occupational Exposure Limits	plomb Métallique	Carc. C1, Carc. C2, Carc. C3, Repro. R1, Repro. R2, Repro. R3	
antimony	France Occupational Exposure Limits	antimoine	Carc. C1, Carc. C2, Carc. C3	

## 12. Ecological information

### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
lead	Mortality	Acute LC50 542 mg/L	Fish	96 hours
	Mortality	Acute LC50 471 mg/L	Fish	96 hours
	Mortality	Acute LC50 1.17 mg/L	Fish	96 hours
zinc chloride	Intoxication	Acute EC50 93.8 mg/L	Daphnia	48 hours
	Intoxication	Acute EC50 2.8 mg/L	Daphnia	48 hours
	Mortality	Acute LC50 0.095 mg/L	Fish	96 hours
	Mortality	Acute LC50 0.093 mg/L	Fish	96 hours
	Mortality	Acute LC50 0.066 mg/L	Fish	96 hours

### Biodegradability

**Other adverse effects** : No known significant effects or critical hazards.

## 13. Disposal considerations




**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**European waste catalogue (EWC)** : 06 04 05\* wastes containing other heavy metals

**Hazardous waste** : Yes.

## 14. Transport information

### International transport regulations

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>ADR/RID Class</b>	1760	Corrosive liquid, n.o.s. (zinc chloride)	8	III		<b>Hazard identification number</b> 80 <b>CEFC Tremcard</b> 80GC9-III
<b>IMDG Class</b>	1760	Corrosive liquid, n.o.s. (zinc chloride). Marine pollutant	8	III		<b>Emergency schedules (EmS)</b> F-A, S-B <b>Marine pollutant</b> Marine pollutant (P)
<b>IATA Class</b>	1760	Corrosive liquid, n.o.s. (zinc chloride)	8	III		<b>Passenger and Cargo Aircraft</b> Quantity limitation: 5 L <b>Cargo Aircraft Only</b> Quantity limitation: 60 L

PG\* : Packing group

## 15. Regulatory information

### EU regulations

Classification and labeling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (including amendments) and take into account the intended product use.

**Hazard symbol or symbols** :



Toxic, Dangerous for the environment

**Risk phrases** :

- R61- May cause harm to the unborn child.
- R62- Possible risk of impaired fertility.
- R20/22- Harmful by inhalation and if swallowed.
- R34- Causes burns.
- R33- Danger of cumulative effects.
- R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases** :

- S53- Avoid exposure - obtain special instructions before use.
- S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
- S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

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## 15. Regulatory information

<b>Contains</b>	: lead	231-100-4
	zinc chloride	231-592-0
	antimony	231-146-5
<b>Product use</b>	: Industrial applications.	

### Other EU regulations

**Restrictions on the Marketing and Use Directive** : Restricted to professional users.

### France

**Professional disease or diseases** : lead RG 1  
antimony RG 73

### Germany

**Hazardous incident ordinance** : Applicable. Category: 9a Dangerous for the environment.

**Hazard class for water** : 3 Appendix No. 4

**Technical instruction on air quality control** : TA-Luft Number 5.2.1: 45.2%  
TA-Luft Class I - Number 5.2.7.1.3: 40.5%

### Italy

**Emission control directive** : 100% Not classified.

## 16. Other information

**Full text of R-phrases referred to in sections 2 and 3 - Europe** : R61- May cause harm to the unborn child.  
R62- Possible risk of impaired fertility.  
R22- Harmful if swallowed.  
R20/22- Harmful by inhalation and if swallowed.  
R34- Causes burns.  
R33- Danger of cumulative effects.  
R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of classifications referred to in sections 2 and 3 - Europe** : Repr. Cat. 1 - Toxic to reproduction Category 1  
Repr. Cat. 3 - Toxic to reproduction Category 3  
C - Corrosive  
Xn - Harmful  
N - Dangerous for the environment

### History

**Date of printing** : 26/03/2012.

**Date of issue** : 26/03/2012.

☑ Indicates information that has changed from previously issued version.

### References

The Health and Safety At Work Act 1974, section 6.  
Control of Substances Hazardous to Health (CoSHH) Regulations 2002 and its amendments.

Preparation contains solely TSCA and EINECS listed substances.

This safety data sheet has been prepared in accordance with the requirements of the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 which implement EC Directives 1999/45/EC and 2001/58/EC and their amendments.

## 16. Other information

### [Notice to reader](#)

*To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.*

*Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*