

## Flux Cored Wires Containing Tin/Lead and Flutin 1532 &amp; 1535 Flux

**1. PRODUCT AND COMPANY IDENTIFICATION**

Trade Name	Flux cored wires containing Tin/Lead and Rosin flux
Products covered by this SDS	BS219 Grade G, KP, 40% tin, 60% lead and 60% tin, 40% lead Fluxes: Flutin 1532 & 1535. Durite part no. <b>0-455-00, 0-455-18, 0-455-58, 0-460-00 and 0-470-00</b>
Manufacturer/Supplier	<b>Gordon Equipments Limited</b> , Durite Works, Dovercourt, Essex, CO12 4RX.
Telephone Number	01255 555200
Fax Number	01255 555222

**2. COMPOSITION/INFORMATION ON INGREDIENTS****Hazardous Ingredients in Preparation for EC**

Ingredient Name	Code	Concentration	R Phrases
Colophony	8050-09-7, 232-475-7	1.80 - 2.20	R43
Lead	7493-92-1, 231-100-	31.00 - 39.00	R33
Tin	7440-31-5, 231-141-8	49.00 - 61.00	
Copper	740-50-8, 231-159-6	0.50 - 2.50	

R33, R43 R33 Danger of cumulative effects. R43 May cause sensitisation by skin contact.

**3. HAZARD IDENTIFICATION**

<b>Main Hazards</b>	Thermal burns from contact with molten product. Danger of cumulative effects. When heated, fumes may cause sensitisation by inhalation. See hazardous decomposition products.
<b>Health Effects - Eyes</b>	Rosin core may cause conjunctival irritation and transient corneal damage. Molten metal may cause severe damage and may result in loss of vision.
<b>Health Effects - Skin</b>	Prolonged or repeated contact with flux core or its residues may cause skin irritation and possible sensitisation. Molten metal may cause severe damage to skin tissue.
<b>Health Effects - Ingestion</b>	Contains lead which is a cumulative poison. Long term effects may include: Anaemia, fatigue, abdominal pain, anorexia, constipation or diarrhoea, collapse, reduction in the oxygen carrying capacity of the blood. Hot materials will cause thermal burns.
<b>Health Effects - Inhalation</b>	Exposure to dust or processing fumes may have the following effects: Inhalation may cause pulmonary sensitisation and may cause asthma, gastrointestinal irritation, vomiting, systemic effects similar to those resulting from ingestion. Because of slow elimination from the body repeated exposure may result in accumulation.

**4. FIRST-AID MEASURES**

<b>First Aid - Eyes</b>	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.
<b>First Aid - Skin</b>	Wash skin thoroughly with soap and water. Obtain medical attention if redness persists. In case of contact with molten metal immediately flood affected area with cold water. Obtain medical attention urgently.
<b>First Aid - Ingestion</b>	Do not induce vomiting. Keep warm and at rest. Obtain medical attention.
<b>First Aid - Inhalation</b>	In case of exposure to processing fumes: Remove from exposure. Keep warm and at rest. Obtain medical attention urgently.
<b>Advice to Physicians</b>	Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

<b>Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Be aware of the possibility of re-ignition. Dry sand may be used on small fires.
<b>Unsuitable Extinguishing Media</b>	Do not use water jet.
<b>Special Hazards of Product</b>	This product may give rise to hazardous fumes in a fire.
<b>Protective Equipment</b>	Wear full protective clothing and self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Wear appropriate protective clothing.
<b>Environment Precautions</b>	Try to prevent the material from entering drains or water courses.
<b>Spillage</b>	Transfer into suitable containers for recovery or disposal. Avoid creating a dust.

**7. HANDLING AND STORAGE**

<b>Handling</b>	Avoid contact with eyes, skin and clothing. Use local exhaust ventilation. Avoid breathing metal fumes from heated material.
<b>Storage</b>	Storage area should be: cool, dry, well ventilated. Store in original containers.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

<b>Occupational Exposure Standards</b>	
<b>Colophony</b>	Rosin-based solder flux fume UK EH40: MEL 0.05mg/m <sup>3</sup> 8h TWA. UKEH40: MEL,STEL 0.15mg/m <sup>3</sup> 15min. Capable of causing respiratory sensitisation.
<b>Lead</b>	Control of Lead at Works Regs: 0.15mg/m <sup>3</sup> 8h TWA.
<b>Tin</b>	UK EH40: OES 2mg/m <sup>3</sup> 8h TWA, UK EH40: OES,STEL 4mg/m <sup>3</sup> 15min.
<b>Copper</b>	UK EH40: OES 1mg/m <sup>3</sup> 8h TWA, UK EH40: OES,STEL 2mg/m <sup>3</sup> 15min.
<b>Engineering Control Measures</b>	Fumes from soldering process should not be breathed. Engineering methods to prevent or control exposure are preferred. Methods include process or personnel enclosure, mechanical ventilation (dilution and local exhaust) and control of process conditions. Administrative controls and personal protective equipment may also be required.

<b>Respiratory Protection</b>	Respiratory protection if there is a risk of breathing mists or vapours from heated material. Dust respirator if conditions are dusty.
<b>Hand Protection</b>	PVC or rubber gloves. Leather, thick textile or other thermal gloves if handling hot material.
<b>Eye Protection</b>	Face shield when handling hot product.
<b>Body Protection</b>	Normal work wear.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	Wire.
<b>Colour</b>	Silver - Grey.
<b>Odour</b>	Mild
<b>Melting Point (°C)</b>	183 - 215
<b>Density (g/ml)</b>	7 - 9.5 at 20°C

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under normal conditions.
<b>Conditions to Avoid</b>	None known.
<b>Materials to Avoid</b>	None known.
<b>Hazardous Decomposition Products</b>	On heating colophony, can give rise to irritating fumes, which have been associated with asthma. Melting may release metal fumes. Heating may produce: oxides of carbon, oxides of nitrogen, hydrogen chloride.

## 11. TOXICOLOGICAL INFORMATION

<b>Acute Toxicity</b>	Low order of acute toxicity.
<b>Irritancy - Eyes</b>	Data for a closely related material suggests that this product will produce conjunctival irritation, corneal damage and iritis.
<b>Irritancy - Skin</b>	Data available for a related material suggests that this product may cause skin irritation.
<b>Skin Sensitisation</b>	The possibility of allergic sensitisation should be considered.
<b>Chronic Toxicity/Carcinogenicity</b>	None known.
<b>Reproductive/Developmental Toxicity</b>	None known.
<b>Human Data</b>	Women of child bearing age should avoid exposure to Lead and its inorganic compounds due to post-natal effects. Lead can cause potential harm to the developing fetus. Inhalation may cause respiratory sensitisation.

## 12. ECOLOGICAL INFORMATION

<b>Mobility</b>	The product is involatile and insoluble and will accumulate in the ground.
<b>Persistence/Degradability</b>	The product is expected to be resistant to biodegradation.
<b>Bio-accumulation</b>	Limited information indicates a potential to bioaccumulate.
<b>Ecotoxicity</b>	The product is rated as non-hazardous to aquatic species.

## 13. DISPOSAL CONSIDERATIONS

<b>Product Disposal</b>	Metals should be recovered when possible. Landfill. Wastes containing high levels of lead oxides are classified as a 'special waste' under the COPA (special waste) Regulations 1996 and must be disposed of in accordance with those regulations.
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## 14. TRANSPORT INFORMATION

<b>UN Class</b>	Not classified.
<b>ADR/RID - Class</b>	Not classified.
<b>IMDG - Class</b>	Not classified.
<b>IMDG - Marine Pollutant</b>	No.
<b>IATA - Class</b>	Not restricted.

## 15. REGULATORY INFORMATION

<b>Labelling Information</b>	<input type="checkbox"/> Not classified (Health)	<input type="checkbox"/> Not classified (Safety)	<input type="checkbox"/> Not classified (Environment)
<b>R Phrases</b>	When heated, fumes may cause sensitisation by inhalation.		
<b>S Phrases</b>	S24 Avoid contact with skin. S37 Wear suitable gloves. Warning contains Lead. Warning contains colophony.		
<b>EINECS Listings</b>	Preparation containing solely TSCA & EINECS listed substances.		

## 16. OTHER INFORMATION

The information contained herein is based on data considered accurate and is offered at no charge. The above data is typical of the product in general but batches may show variations. No warranty is expressed or implied regarding the accuracy of this data. Liability is expressly disclaimed for loss or injury arising out of use of this information or the use of any materials designated. In countries other than the UK, there may be different Exposure Limits, please check with your National Authorities

