SAFETY DATA SHEET

Flux Cored Wires Containing Tin/Lead and Fluitin 1532 & 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: Fluitin 1532 & 1535. Durite part no. **0-455-00, 0-455-18, 0-455-58, 0-460-00** and **0-470-00**
Manufacturer/Supplier	**Gordon Equipments Limited**, 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

Main Hazards	Thermal burns from contact with molten product. Danger of cumulative effects. When heated, fumes may cause sensitisation by inhilation. See hazardous decomposition products.
Health Effects - Eyes	Rosin core may cause conjunctival irritation and transient corneal damage. Molten metal may cause severe damage and may result in loss of vision.
Health Effects - Skin	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.
Health Effects - Ingestion	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.
Health Effects - Inhalation	Exposure to dust or processing fumes may have the following effects: Inhalation may cause pumonary 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

First Aid - Eyes	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.
First Aid - Skin	Wash skin thouroughly 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.
First Aid - Ingestion	Do not induce vomiting. Keep warm and at rest. Obtain medical attention.
First Aid - Inhalation	In case of exposure to processing fumes: Remove from exposure. Keep warn and at rest. Obtain medical attention urgently.
Advice to Physicians	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

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

6. ACCIDENTAL RELEASE MEASURES

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

7. HANDLING AND STORAGE

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards

Colophony	Rosin-based solder flux fume UK EH40: MEL 0.05mg/m3 8h TWA. UKEH40: MEL,STEL 0.15mg/m3 15min. Capable of causing respiratory sensitisation.
Lead	Control of Lead at Works Regs: 0.15mg/m3 8h TWA.
Tin	UK EH40: OES 2mg/m3 8h TWA, UK EH40: OES,STEL 4mg/m3 15min.
Copper	UK EH40: OES 1mg/m3 8h TWA, UK EH40: OES,STEL 2mg/m3 15min.

Engineering Control Measures	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.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

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

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity	Low order of acute toxicity.
Irritancy - Eyes	Data for a closely related material suggests that this product will produce conjunctival irritation, corneal damage and iritis.
Irritancy - Skin	Data available for a related material suggests that this product may cause skin irritation.
Skin Sensitisation	The possibility of allergic sensitisation should be considered.
Chronic Toxicity/Carcinogenicity	None known.
Reproductive/Developmental Toxicity	None known.
Human Data	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

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

13. DISPOSAL CONSIDERATIONS

Product Disposal	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.

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

Labelling Information

☐ Not classified (Health) ☐ Not classified (Safety) ☐ Not classified (Environment)

R Phrases	When heated, fumes may cause sensitisation by inhilation.
S Phrases	S24 Avoid contact with skin. S37 Wear suitable gloves. Warning contains Lead. Warning contains colophony.
EINECS Listings	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