SAFETY DATA SHEET



Powerflow Paste Medium

Identification of the preparation and of the company 1.

| Product name | | | owerflow Paste Medium | | | | |
|--------------|---------------------|-------|--|--------------------|--------|--|--|
| Code | : | 20437 | | | | | |
| | Head Office | : | Cookson Electronics Forsyth Road Sheerwater Woking Surrey England GU21 5RZ Tel: +44(0)1483 758400 Fax: +44(0)1483 728837 | Manufacturer | : | Cookson Electronics Koenendelseweg 29 5222 BG 's-Hertogenbosch The Netherlands Tel: +31 73 6280 111 Fax: +31 73 6219 283 | |
| | Contact person | : | shosken@cooksonelectronics.com | | | | |
| | Material uses | : | soldering | | | | |
| 2 | Hazards | s i | dentification | | | | |
| The | e product is classi | fie | d as dangerous according to Direc | tive 1999/45/EC ar | nd its | amendments. | |

Classification

: Xi; R41

Effects and symptoms **Skin contact** Not available. Very hazardous by the following route of exposure: of eye contact (irritant). Eye contact **Toxicity data** Not available. See section 11 for more detailed information on health effects and symptoms.

Composition/information on ingredients 3

| Ingredient name | CAS number | % | EC number | Classification |
|--|---------------|---------|-----------|--------------------|
| Europe Alcohols, C11-14-iso-, C13-rich, ethoxylated | 78330-21-9 | 20 - 30 | 616-609-5 | Xn; R22 Xi; R41 |
| See section 16 for the full text of the R-phrases declared above | | | | |

Occupational exposure limits, if available, are listed in section 8.

The classifications listed, indecate the potential hazards of the ingredients

4. First-aid measures

First-aid measures

Inhalation

: Move exposed person to fresh air. 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. Get medical attention if adverse health effects persist or are severe. 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. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.



1/7

Date of issue

: 03/03/2011.

Powerflow Paste Medium

| 4. | First- | d measures |
|-------|--------|---|
| Inges | tion | : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and t |

| | | fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. 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. Get medical attention if adverse health effects persist or are severe. 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 | : | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| Notes to physician | : | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| • • • • • • • | | |

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. |
| | 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. |
| Hazardous combustion products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds |
| 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 | : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). | |
|---------------------------|---|--|-----|
| Environmental precautions | : | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drain and sewers. Inform the relevant authorities if the product has caused environme pollution (sewers, waterways, soil or air). | |
| Large spill | : | Move containers from spill area. Approach the release from upwind. Prevent en 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 | : | Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. | |
| Date of issue | : | 03/03/2011. | 2/7 |



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. Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| Storage | : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. |
| Packaging materials | |
| Recommended | : Use original container. |

Exposure controls/personal protection 8.

| <u>Exposure limit values</u> | |
|--------------------------------|------------------------------|
| Ingredient name | Occupational exposure limits |
| Europe | |
| No exposure limit value known. | |
| Sweden | |
| No exposure limit value known. | |
| Denmark | |
| No exposure limit value known. | |
| Norway | |
| No exposure limit value known. | |
| France | |
| No exposure limit value known. | |
| Netherlands | |
| No exposure limit value known. | |
| Germany | |
| No exposure limit value known. | |
| Finland | |
| No exposure limit value known. | |
| United Kingdom (UK) | |
| No exposure limit value known. | |
| Austria | |
| No exposure limit value known. | |
| Switzerland | |
| No exposure limit value known. | |
| Belgium | |
| No exposure limit value known. | |
| Spain | |
| No exposure limit value known. | |
| Turkey | |
| No exposure limit value known. | |
| Czech Republic | |
| No exposure limit value known. | |
| Date of issue : | 03/03/2011. 3/7 |



| Powerflow Paste Medium | | | | |
|--|--|--|--|--|
| 8. Exposure controls/personal protection | | | | |
| Ireland | | | | |
| No exposure limit value known. | | | | |
| Italy | | | | |
| No exposure limit value known. | | | | |
| Estonia | | | | |
| No exposure limit value known. | | | | |
| Lithuania | | | | |
| No exposure limit value known. | | | | |
| Slovakia | | | | |
| No exposure limit value known. | | | | |
| Hungary | | | | |
| No exposure limit value known. | | | | |
| Poland | | | | |
| No exposure limit value known. | | | | |
| Slovenia | | | | |
| No exposure limit value known. | | | | |
| Latvia | | | | |
| No exposure limit value known. | | | | |
| Greece | | | | |
| No exposure limit value known. | | | | |
| Portugal | | | | |
| No exposure limit value known. | | | | |
| 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 | No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or | | | |

| procedures | | 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 | : | No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. |
| 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 | : | Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |
| 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. |
| 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 or dusts. |
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: 03/03/2011.

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8. Exposure controls/personal protection

| | - | | | | |
|-----|------|----|-----|------|----------|
| C L | in r | ro | tar | sti/ | n |
| | | лυ | Let | | Л |

 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.

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

2

General information

Physical state

Appearance

- : Solid. [Paste.]
- Colour: White to yellowish.Odour: Characteristic.
- Odour: Characteristic.VOC content: 0 % (w/w) [IS0
 - : 0 % (w/w) [ISO % 11890-2]

| Stability | 1 | The product is stable. |
|----------------------------------|---|--|
| Conditions to avoid | : | No specific data. |
| 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 : Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Ingestion : No known significant effects or critical hazards. Skin contact : No known significant effects or critical hazards. Eye contact : Severely irritating to eyes. Risk of serious damage to eyes. Acute toxicity : Severely irritating to eyes. Risk of serious damage to eyes.

Over-exposure signs/symptoms

12. Ecological information

Aquatic ecotoxicity

| Biodegradability Other adverse effects | : No known significant effects or critical hazards. |
|---|---|
| ΑΟΧ | : The product contains organically bound halogens and can contribute to the AOX value in waste water. |

13. Disposal considerations

| Methods of disposal | : The generation of waste should be avoided or minimised wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. 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. |
|---------------------|---|
| Hazardous waste | : The classification of the product may meet the criteria for a hazardous waste. |
| Date of issue | : 03/03/2011. 5/7 |



14. Transport information

International transport regulations

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|------------------------|-------------------|----------------------|-------------------|-----|-------|------------------------|
| ADR/RID Class | Not available. | Not available. | Not available. | - | | - |
| IMDG Class | Not available. | Not available. | Not available. | - | | - |
| IATA Class | Not available. | Not available. | Not available. | - | | - |

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 :



| Risk phrases Safety phrases | R41- Risk of serious damage to eyes. S2- Keep out of the reach of children. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S39- Wear eye/face protection. S46- If swallowed, seek medical advice immediately and show this container or label. |
|--|---|
| Product use | : Consumer applications. |
| Germany | |
| Hazard class for water | : 3 Appendix No. 4 |
| Technical instruction on air quality control | : TA-Luft Number 5.2.1: 43% |
| Male . | |

<u>Italy</u>

Emission control directive : Not classified.

16. Other information

| Full text of R-phrases referred to in sections 2 and 3 - Europe | : R22- Harmful if swallowed. R41- Risk of serious damage to eyes. |
|---|--|
| Full text of classifications referred to in sections 2 and 3 - Europe | : Xn - Harmful Xi - Irritant |
| <u>History</u> | |
| Date of printing | : 20/07/2011. |
| Date of issue | : 03/03/2011. |
| Date of previous issue | : 12/10/2010. |
| Version | : 6 |
| Prepared by | : Not available. |
| | |

✓ Indicates information that has changed from previously issued version.

References



16. Other information

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

Preparation contains soley TSCA and REACh 1907/2006 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.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed 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.



