

MULTICORE SOLDERS LIMITED

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Revision

Material Safety Data Sheet

Product Information

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

Product Name Spot-On Temporary Solder Resist

Manufacturer Multicore Solders Ltd, Kelsey House, Wood Lane End,
Hemel Hempstead, Herts, HP2 4RQ, United Kingdom
Telephone +44 (0)1442 233233

2. COMPOSITION / INFORMATION ON INGREDIENTS

Spot-On is a thickened natural rubber latex stabilised with ammonia.

3. HAZARDS IDENTIFICATION

The ammonia stabiliser may irritate the respiratory system and eyes if the fumes are allowed to accumulate. Some individuals may react to the small quantities of proteins which are present in the rubber latex and this may lead to skin sensitisation. Prolonged skin contact may cause irritation.

4. FIRST-AID MEASURES

Inhalation Irritates the nose and throat.

Remove the affected person to fresh air. If respiratory distress persists seek medical attention.

Ingestion Will irritate the digestive tract.

Encourage the patient to rinse the mouth out several times with water. Do not induce vomiting nor give anything to drink if the patient finds it difficult to swallow. Obtain medical attention.

Skin Contact Skin irritation may result on prolonged.

Wash the affected parts of the body with soap and warm water. Remove contaminated clothing which should be laundered before re-use. If skin irritation persists seek medical advice.

Eye Contact The paste will irritate the eyes.

Flush **immediately** with plenty of water. Ensure that the eyeball and the inside of the eyelids are properly bathed by gently prising open the eyelids. Also make sure that the contaminated water runs off the face away from the eyes. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Extinguishers: Suitable - dry chemical, carbon dioxide, water spray or foam.
Unsuitable - water jet.

Spot-on is water based and is not flammable or combustible. The dried film will burn. Under fire conditions the product will release irritant fumes and smoke. Fire fighters should wear full protective clothing and self-contained, positive pressure breathing apparatus.

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Date: 19 June 1997	Prepared by: <i>Barry Chase</i>	
	Authorised by: <i>B Watson</i>	
This is an uncontrolled copy within Multicore Solders' ISO 9001 system. Recipients are advised to check that they have the current version after 12 months from the issue date.		

6. ACCIDENTAL RELEASE MEASURES

Allow spilt material to solidify. Scrape up and store in a suitable container.

7. HANDLING AND STORAGE

Store in a cool, dry place away from incompatible materials. Avoid exposure to direct sunlight and high temperatures. Protect from frost.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Spot-on should be used in a well ventilated area to prevent the build-up of ammonia fumes.

Occupational Exposure Limits

Substance	Long-term Exposure Limit (8 hour TWA)		Short-term Exposure Limit (15 minute)	
Ammonia	25 ppm	18 mg/m ³	35 ppm	25 mg/m ³

Ref: EH40 Occupational Exposure Limits (revised annually)

Respiratory Protection: Necessary if there is a risk of exposure to ammonia fumes.

Eye Protection: Operators should wear safety glasses or goggles if there is a risk of eye contact.

Skin Protection: PVC or rubber gloves are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Opaque white liquid
Odour	Ammoniacal
Boiling point	100°C
Flash point	None
Relative density at 25°C	1.000
Solubility in water	Miscible when liquid

10. STABILITY AND REACTIVITY

Materials to Avoid

The product is stable but will react vigorously with concentrated sulphuric acid, acid chlorides and other materials which react violently with water. Contact with acids will cause the rubber latex to coagulate.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Ingestion: Spot on will coagulate in the stomach causing gastric irritation.

Skin contact: Prolonged contact with the skin may cause irritation.

Eye contact: The liquid will cause irritation of the eyes.

Inhalation: The ammonia present will give rise to irritating fumes.

Chronic Toxicity

There is no indication of chronic health effects from this product.

12. ECOLOGICAL INFORMATION

Spot-On is not considered to present a risk to the environment.

13. DISPOSAL CONSIDERATIONS

The product should be disposed of in accordance with local and national legislation. In the UK this is the Control of Pollution Act 1974, the Environmental Protection Act 1990 and regulations made under them. The recommended disposal method is controlled incineration.

Empty containers should be cleaned by appropriate methods and re-used or disposed of to landfill or by incineration. Labels should not be removed from containers until they have been cleaned of hazardous residues. Do not incinerate closed containers.

14. TRANSPORT INFORMATION

The product is not classified as hazardous for transport.

15. REGULATORY INFORMATION

Classification according to the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994:

The product is not classified as hazardous for supply.

Applicable EC Directives

Dangerous Substances Directive 67/548/EEC as amended by Directive 92/32/EEC

Dangerous Preparations Directive 88/379/EEC as amended by Directive 90/492/EEC

Directive 80/1107/EEC on the protection of workers from the risk related to exposure to physical, chemical and biological agents at work

Applicable UK Legislation

The Health and Safety at Work, etc. Act 1974

The Control of Substances Hazardous to Health Regulations 1994

The information presented in this safety data sheet is accurate to the best of knowledge and belief of Multicore Solders Ltd. As we cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, are used this safety data sheet cannot constitute the user's assessment of workplace risk. Users are advised to make their own tests to determine the safety and suitability of each product or product combination for their own purposes.

16. OTHER INFORMATION

Recommended Uses

Spot-On is a peelable temporary solder resist. Spot-on should not be immersed in chlorinated or fluorinated solvents as these may cause the cured material to become sticky and unpeelable. Further information on application use can be obtained from Multicore Solders' Technical Sales Team.

Further Detailed Guidance from the UK Health and Safety Executive

HS(G) 37: An Introduction to Local Exhaust Ventilation

HS(G) 53: Respiratory Protective Equipment - a Practical Guide for Users

Approved Code of Practice - Management of Health and Safety at Work

General Approved Code of Practice to the COSHH Regulations

This safety data sheet has been produced to comply with the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994, (Commission Directive 91/155/EEC, as amended by Directive 93/112/EEC.)

Reason for revision: As part of a general review of Multicore safety data sheets. No major changes have been made.

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Revision

Material Safety Data Sheet

Product Information

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

Product Name Copper Spot-On Temporary Solder Resist

Manufacturer Multicore Solders Ltd, Kelsey House, Wood Lane End,
Hemel Hempstead, Herts, HP2 4RQ, United Kingdom
Telephone +44 (0)1442 233233

2. COMPOSITION / INFORMATION ON INGREDIENTS

Copper Spot-On is a water based blend of acrylic latex polymer and plasticiser.

3. HAZARDS IDENTIFICATION

Prolonged or repeated skin contact may cause irritation. The fumes emitted from the hot product may cause irritation of the nose and throat.

4. FIRST-AID MEASURES

Inhalation Irritates the nose and throat.

Remove the affected person to fresh air. If respiratory distress persists seek medical attention.

Ingestion Ingestion may cause nausea and vomiting.

If the casualty is unconscious but breathing, place in the recovery position. If breathing has stopped apply artificial respiration or apply oxygen by mask. If the patient is conscious then encourage him / her to rinse the mouth out several times with water. Do not induce vomiting nor give anything to drink if the patient finds it difficult to swallow. Obtain urgent medical attention.

Skin Contact Skin irritation may result on prolonged or repeated contact.

Wash the affected parts of the body with soap and warm water. Remove contaminated clothing which should be laundered before re-use. If skin irritation persists seek medical advice.

Eye Contact The liquid will irritate the eyes.

Flush **immediately** with plenty of water. Ensure that the eyeball and the inside of the eyelids are properly bathed by gently prising open the eyelids. Also make sure that the contaminated water runs off the face away from the eyes. Obtain medical attention.

5. FIRE FIGHTING MEASURES

Extinguishers: Suitable - dry chemical, carbon dioxide, water spray or foam.
Unsuitable - water jet.

Under fire conditions the product will release irritant fumes. Fire fighters should wear full protective clothing and self-contained, positive pressure breathing apparatus.

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6. **ACCIDENTAL RELEASE MEASURES**

Allow spilt material to solidify. Scrape up and store in a suitable container.

7. **HANDLING AND STORAGE**

Store in a cool, dry place away from incompatible materials. Avoid exposure to direct sunlight and high temperatures.

8. **EXPOSURE CONTROLS / PERSONAL PROTECTION**

Engineering methods to prevent or control exposure are preferred. Local exhaust or dilution ventilation and control of process conditions are suitable methods. Where engineering controls and work practices are not effective in controlling exposure then suitable respiratory protective equipment should be used.

Occupational Exposure Limits

None assigned.

Respiratory Protection: Necessary if there is a risk of exposure to fumes from the hot liquid.

Eye Protection: Operators should wear safety glasses or goggles if there is a risk of splashing.

Skin Protection: PVC or rubber gloves are recommended.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	Opaque pink liquid
Odour	Mild
Boiling point	100°C
Flash point	None
Solubility in water	Insoluble

10. **STABILITY AND REACTIVITY**

Materials to Avoid

The product is stable but will react vigorously with concentrated sulphuric acid, acid chlorides and other materials which react violently with water.

11. **TOXICOLOGICAL INFORMATION**

Acute Toxicity

Ingestion: Ingestion will cause irritation of the digestive tract, nausea and vomiting.

Skin contact: Contact with the skin may cause irritation.

Eye contact: The liquid will cause irritation of the eyes.

Inhalation: The heated product will give rise to irritating fumes.

Chronic Toxicity

There is no indication of chronic health effects from this product.

12. **ECOLOGICAL INFORMATION**

Copper Spot-On is not considered to present a risk to the environment.

13. **DISPOSAL CONSIDERATIONS**

The product should be disposed of in accordance with local and national legislation. In the UK this is the Control of Pollution Act 1974, the Environmental Protection Act 1990 and regulations made under them. The recommended disposal method is controlled incineration.

Empty containers should be cleaned by appropriate methods and re-used or disposed of to landfill or by incineration. Labels should not be removed from containers until they have been cleaned of hazardous residues. Do not incinerate closed containers. Do not cut, puncture or weld on or near contaminated containers.

14. TRANSPORT INFORMATION

The product is not classified as hazardous for transport.

15. REGULATORY INFORMATION

Classification according to the Chemicals (Hazard Information and Packaging for Supply) Regulations 1994:

The product is not classified as dangerous for supply.

Applicable EC Directives

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16. OTHER INFORMATION

Recommended Uses

Copper Spot-On is a peelable temporary solder resist. Further information on application use can be obtained from Multicore Solders' Technical Sales Team.

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