




Safety Data Sheet

Surclean Brightflow 210 Universal Solder Flux

1. Product Identification

Product Code	Surclean Brightflow 210 Flux
Trade Name	None
Manufacturer	Surclean Electronic Production Materials, Samuel White's Industrial Estate, Cowes, Isle of Wight, PO31 7LP, United Kingdom.
Supplier / Importer	
24 hour Emergency Contact (UK)	+44 (0) 1983 290333

2. Composition and information on Components

Hazardous Components		Content	EC No	CAS	Hazard	Risk
Propan-2-OL		<90%	200-746-9	67-63-0	F: Highly Flammable	R11
					X _n :Irritant	R36/37/38
Remainder					Not classified	

3. Hazard Identification

Main Hazards	Highly Flammable Irritating to eyes, respiratory system and skin
Health Effects Inhalation - Ingestion	Inhalation of the fumes or ingestion may cause headache, nausea, muscular pain. Irritation of the eyes and nose may result from contact with soldering fumes.
Chronic (Prolonged effects)	Anaemia, insomnia, weakness, constipation, nausea and abdominal pain due to ingestion. Skin rash, damage of mucous membrane due to skin exposure and inhalation.

4. First Aid Measures

First Aid - Eyes	Immediately flush the eyes with water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.
First Aid - Skin	Wash thoroughly with soap and water and remove all contaminated clothing as washing proceeds. Apply suitable lotion to prevent dryness. Seek medical attention.
First Aid - Inhalation	Remove person to fresh air and keep subject warm and at rest. Seek medical attention.
First Aid - Ingestion	Wash out mouth with water. Do not induce vomiting. Keep subject warm and at rest. Seek medical attention.

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5. Fire Fighting Measures

Extinguishing media	Use Carbon Dioxide, Dry chemical, Alcohol resistant foam. Beware of the possibility of re-ignition.
Special Hazards	Dangerous when exposed to heat of flame. Containers may explode in heat of fire. Vapours can travel a considerable distance to source of ignition to cause flash-back.
Protective Equipment for Fire Fighting	Wear full protective clothing and use breathing apparatus.

6. Accidental Release Measures

Personal Precautions	Wear appropriate protective clothing. Eliminate sources of ignition. Vapour is heavier than air and will collect in basements or depressions etc.. Avoid breathing vapour.
Environmental Precautions	Try to prevent the product entering drains or water courses.
Spillages	Small spillages can be flushed with large volumes of water. Larger spillages should be collected for disposal. Beware of vapour collecting to form explosive concentrations. Allow to evaporate if it is safe to do so or contain using absorbent material such as earth, sand or other inert material.

7. Handling and Storage

Handling	Use in well ventilated area. Avoid breathing in vapour, mist or resultant soldering fumes. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Larger containers (20l) are heavy. Take care when lifting and pouring.
Storage	Storage area should be well ventilated, cool and dry. Store in original containers. Re package only if container becomes damaged. Store away from sources of heat or ignition.

8. Exposure Controls - Personal Protection

Occupational Exposure Limits	TLV	OSHA PEL	ACGIH TLV
Propan-2-OL	400ppm	400ppm	400ppm
Engineering Control Measures	Ensure work area is well ventilated and equipment exhausted. If pouring is needed then this should be arranged so as not to expose the operator to unnecessary vapour levels.		
Respiratory Protection	Respiratory protection if there is a risk of exposure to high vapour levels.		
Hand protection	Nitrile rubber gloves or PVC gloves should be used when handling or pouring		
Eye Protection	Close fitting Chemical goggles should be worn when handling or pouring.		
Skin Protection	Normal work wear but rubber apron if there is a danger of splashing or spillage.		
Foot Protection	Wear protective boots or toe caps when handling drums.		

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9. Physical and Chemical Properties

Appearance	light straw liquid
Odour	Ethereal Odour
Acid Number	24 +/- 1.0
Boiling point	82 Deg C @ 760mm Hg
Melting point	n/a
Flash Point	16 Deg C
Auto Ignition Temperature	456 Deg C
Flammability limits in air	Lower : 2.5 % Upper : 12 %
Explosion Limits	Lower : 2.5 % Upper : 12 %
Vapour pressure	33.0 mm Hg at 50 Deg C
Vapour Density	2.07 (Air = 1)
Evaporation Rate	<2.3 (BuAc = 1)
Specific Gravity	0.820 +/- 0.006 (H ₂ O = 1 @ 25 Deg C)
Solubility	Partially soluble in water

10. Stability and Reactivity

Stability	Stable under normal conditions
Conditions to avoid	High temperature - sources of ignition
Materials to avoid	Strong oxidising agents
Hazardous Decomposition Products	May release toxic vapours / gases such as Carbon Monoxide, Carbon Dioxide

11. Toxicological Information

Basis of Assessment	Information given is based on product data
Acute Toxicity - Oral	LD50 > 2000 mg/kg
Acute Toxicity - Dermal	LD50 > 2000 mg/kg
Acute Toxicity - Inhalation	LD50 > 5mg/L
Eye Irritation	Slight irritant
Skin Irritation	Slight Irritant
Respiratory Irritation	Irritant in animal studies
Skin sensitisation	May cause skin sensitisation
(Sub) Chronic Toxicity	Repeated exposure causes liver damage
Human effects	Repeated exposure can lead to allergic contact dermatitis. High exposure can cause drowsiness and dizziness. Can cause liver damage. There may be other health risks but these will vary from person to person.

12. Ecological Information

Mobility	The product will readily dissolve in water
Degradability	The product is readily Biodegradable
Bio-accumulation	Not expected to accumulate
Ecotoxicity	Poses a significant risk of oxygen depletion in aquatic systems

13. Disposal

Product	Incineration recommended. Material is classified as special waste under the COPA regulations 1980 and must be disposed of in accordance with those regulations.
Containers	Leave labels in tact until containers have been thoroughly cleaned. Empty containers may contain hazardous residues and vapours. Dispose of containers with care




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14. Transport Information

UN Number, Shipping name and Class	1993	Flammable Liquid NOS
Proper Shipping Name	Contains Isopropanol	
UN Class / Packing Group	3 / II	
Packing Symbol	Flammable Liquid	

Trim Card Number	Brightflow 210
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15. Regulatory Information

Labelling Information	Highly Flammable	Irritant	Environmental
			

Risk Phrases	R11	:Highly Flammable
	R36/37/38	:Irritating to eyes, respiratory system and skin

Safety Phrases	S7	:Keep container tightly closed
	S16	:Keep away from sources of ignition - No Smoking
	S24	:Avoid contact with skin
	S23	:Do not breath fumes or spray
	S26	:In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S62	: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

EC Annex 1 Classification	F:	Highly Flammable
	X _i	Irritant

Regulations / References	Refer to the requirements of all relevant local regulations. For the United Kingdom, see Control of Substances Hazardous to Health Regulations (COSHH), the Health and Safety at Work Act (HSWA) and the Carriage of Dangerous Goods by Road and Rail Regulations 1994.
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16. Other Information

Application	See technical data sheet for application information
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06/2007 Rev. 1.0