

ColoFlux® Colophony based Soft Soldering Flux Paste

DIPL.-ING. ERNEST SPIRIG CH-8640 RAPPERSWIL

TEL +41 55 222 69 00 FAX +41 55 222 6969 E-MAIL: info@spirig.com

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EG SAFETY DATA SHEET Coloflux (# 11218)

1. Chemical product and company identification

Tradename	Paste flux for soft soldering, COLOFLUX®
Manufacturer / Supplier	Ernest Spirig, Dipl.Ing.
Address	Hohlweg 1 , CH-8640 Rapperswil, Switzerland
Telephone Number	(+41 55 222 6900
Telefax Number	(+41 55 222 6969
E-Mail	info@spirig.com
Emergency Number	+1 352 323 3500

2. Composition / Information on the Components

Hazardous Components in Product for EC Component Name

1. Colophony	Code: 8050-09-7-232-475-7	Concentration: 77.00 - 82.00	R Phrases: 43
2. Isopropanol	Code: 67-63-0 200-661-7	Concentration: 10.00 - 20.00	R Phrases: 11-36
Risk Phrases	R11 Highly flammable R36 Irritating to eyes R43 May cause sensitization		

3. Hazard Identification

Main Hazards	Highly flammable. May cause sensitization by skin contact. See hazardous decomposition products.
Health Effects	
Eyes	Paste will cause conjunctival irritation and possibly corneal damage.
Skin	Prolonged or repeated contact may cause itching and soreness and possible sensitization. Repeated or prolonged contact may produce defatting of the skin leading to irritation and dermatitis.
Ingestion	Swallowing may have the following effects: - drowsiness, dizziness, headache, pulmonary oedema, central nervous system depression. Doses of 100g or above may cause the following effects:- in exceptional circumstances may be fatal.
Inhalation	Exposure to vapour may have the following effects: eye irritation. Exposure to vapour at high concentrations may have the following effects: - dizziness, drowsiness, headache, central nervous system depression.

4. First Aid Measures

Eyes	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.
Skin	Wash skin thoroughly with soap and water. Obtain medical attention if redness persists. Contaminated clothing should be washed or dry-cleaned before re-use.
Ingestion	Wash out mouth with water. Do not induce vomiting. Keep warm and at rest. Never administer anything by mouth if a victim is losing consciousness, or is unconscious. Obtain medical attention.
Inhalation	Remove from exposure. Keep warm at rest. If loss of consciousness occurs, place in recovery position. Obtain medical attention.
Advice to Physicians	Treat symptomatically

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5. Fire Fighting Measures

Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Be aware of the possibility of re-ignition. Dry sand may be used for small fires.
Unsuitable Extinguishing Media	None
Special Hazards of Product	Dangerous when exposed to heat or flame. Containers may explode in heat of fire. Vapours can travel a considerable distance to a source of ignition and flashback.
Protective Equipment for Fire Fighting	Wear full protective clothing and self-contained breathing apparatus.

6. Accidental Release Measures

Personal Precautions	Wear appropriate protective clothing. Eliminate all sources of ignition. Gas is heavier than air and will collect in basements, depressions, etc.
Environmental Precautions Spillages	Try to prevent the material from entering drains or water courses. Transfer into suitable containers for recovery or disposal. Finally flush area with plenty of water.

7. Handling and Storage

Handling	Use in well ventilated area. Avoid breathing mist or vapour from heated material. Avoid contact with eyes, skin and clothing.
Storage	Keep container tightly closed when not in use. Storage area should be: cool, dry, well ventilated. Store in original containers. Store away from sources of heat or ignition.

8. Exposure Control / Personal Protection

Occupational Exposure Standards	
1. Colophony	Rosin-based flux fume UK EH40: MEL 0,05 mg/m ³ 8h TWA. UK EH40: MEL,STEL 0,15 mg/m ³ 15 min. Capable of causing respiratory sensitization.
2. Isopropanol	UKE40: OEXS400 ppm 8h TWA. UK EH40: OES, STEL 500 ppm 15 min, Can be absorbed through skin.
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 exposure to high vapour concentrations.
Hand Protection	Nitrile rubber gloves. PVC gloves.
Eye Protection	Chemical goggles or face shield. Eye protection should be worn during soldering processes.
Body Protection	Normal work wear. If there is danger of splashing, wear: rubber apron.

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9. Physical and Chemical Properties

Physical State	Paste.
Colour	Amber.
Odour	Alcoholic. / Characteristic.
pH	Not applicable.
Boiling Range/Point (°C)	No data.
Melting Point (°C)	No data.
Flash Point (PMCC) (°C)	12
Explosion Limits (%)	Upper limit 12.0. Lower limit 2.0
Solubility in Water (kg/m³)	Partially soluble.
Vapour Pressure (kPa)	4.3 at 20 °C
Density (g/ml)	No data.
Flammability	Classified as "Highly Flammable" in the EEC.
Auto-flammability (deg C)	425
Vapour Density (Air = 1)	2.0
Decomposition Temp. °C	No data.
Evaporation Rate	2.8 (referenced as n-butyl acetate = 1)

10. Stability and Reactivity

Stability	Stable under normal conditions
Conditions to Avoid	High temperatures.
Materials to Avoid	Strong oxidizing agents. Strong acids.
Hazardous Decomposition Products	On heating Colophony, can give rise to irritating fumes, which have been associated with asthma

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 Sensitization	The possibility of allergic sensitization should be considered.
Chronic Toxicity / Carcinogenicity	None known.
Reproductive/Developmental Toxicity	None known.
Human Data	Inhalation may cause respiratory sensitization.

12. Ecological Information

Mobility	A major part of the product will dissolve rapidly in water
Persistence / Degradability	The product is readily biodegradable.
Bio-accumulation	Product is not expected to bioaccumulate.
Ecotoxicity	The product is rated as slightly toxic to aquatic species.

13. Disposal

Product Disposal	Incineration is the recommended method of disposal. This material will be classified as a "special waste" under the COPA (Special Waste) Regulations 1996 and must be disposed of in accordance with those regulations.
Container Disposal	Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care. Contaminated containers must not be re-used.

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14. Transport Information

		Colophony (77-82%)	Isopropyl alcohol (10-20%)
Shipping Name		Colophony	Isopropyl alcohol
UN Number			1219
UN Class			3
UN Packaging Group			II
CAS		8050-09-7	67-63-0
Einecs		650-015-00-7	200-661-7
ADR/RID-Class			3
ADR/RID-Packaging Group			1219
ADR/RID-Hazard Identification Number			33

NO Dangerous Goods

15. Regulatory Information

Labelling Information

Irritant

Highly flammable



R phrases

R11 Highly flammable

R36 Irritating to eyes

R43 May cause sensitization by skin contact.

S phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition - No Smoking.

S24 Avoid contact with skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37 Wear suitable gloves.

S9 Keep container in a well ventilated place.

EINECS Listing

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.

MSDS first issued
MSDS data revised

19 July 1996
27 April 2006