

SAFETY DATA SHEET

Manufacturer – Surclean materials Technology, SMT Technology Centre, Cowes, I.o.W., PO31 7AD, United Kingdom. Emergency contact – Tel: +44 (0)1983 290333 Email: info@surclean.co.uk SSF-26 Soldering Flux

1.Identification of the substance/mixture

Product Name: SSF-26 Flux – Use: Industrial soft Soldering of Stainless Steels.

2. Hazards identification

2.1 Classification of the substance or mixture
Product definition: Mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Acute Tox. 4, H302
Skin Corr. 1A, H314
Eye Dam. 1, H318
The product is classified as hazardous according to Regulation (EC) 1272/2008 asamended.
See Section 16 for the full text of the H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

Hazard pictograms:



Signal word	Danger
Hazard statements	Harmful if swallowed.
	Causes severe skin burns and eye damage.

Precautionary statements

D	Wear protective gloves. Wear eye or face protection.
Prevention	Wear protective clothing.

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Response:	 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTRE or physician. IF SWALLOWED: Immediately call a POISON CENTRE or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTRE or physician. IF IN EYES: Immediately call a POISON CENTRE or physician.
Storage:	Store locked up.
Disposal:	Dispose of contents and container in accordance with all local, regional, national and international regulations.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Special packaging requirements

Containers to be fitted	
with child-resistant	Not applicable.
fastenings:	
Tactile warning of danger:	Not applicable.

2.3 Other hazards

Other hazards which do
not result in classification: Not known.

3.Composition/information on ingredients

3.2 Mixtures: Mixture

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Product/ingredie nt name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Туре
Phosphoric acid CAS	S: 7664-38-2	≥75 - ≤90	Acute Tox. 4, H302 Skin [2] Corr. 1A, H314 Eye Dam. 1, H318 See Section 16 for the full text of the H statements declared above.	1]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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

4.First Aid Measures

4.1 Description of first aid measures

Eye contact Get medical attention immediately. Call a poison center or physician. 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.

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Inhalation	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or selfcontained breathing apparatus. 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. 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	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Chemical burns must be treated promptly by a physician. 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.
Protection of first- aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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4.2 Most important symptoms and effects, both acute and delayed Over-exposure signs/symptoms

Eye contact	Adverse symptoms may include the following: pain watering redness
Inhalation	No specific data
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	Adverse symptoms may include the following: stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	No specific treatment

5.Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or
mixtureIn a fire or if heated, a pressure increase will occur and the
container may burst.Hazardous combustion productsDecomposition products may include the following materials:
phosphorus oxides

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5.3 Advice for firefighters

Special protective actions for firefighters	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.
Special protective equipment for fire-fighters	r Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

6.Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	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 spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear
	appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

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Small spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

6.4 Reference to other
sectionsSee Section 8 for information on appropriate personal protective
equipment.
See Section 13 for additional waste treatment information.

7. Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should beconsulted for any available use-specific information provided in the Exposure Scenario(s).



7.1 Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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 re-use container.
Advice on general occupational hygiene	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. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

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. Store locked up. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Not available

Industrial sector specific solutions Not available



8. Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters Occupational exposure limits No exposure limit value known

Recommended	If this product contains ingredients with exposure limits, personal,
monitoring	workplace atmosphere or biological monitoring may be required to
procedures	determine the effectiveness of the ventilation or other control measures
	and/or the necessity to use respiratory protective equipment. Reference
	should be made to monitoring standards, such as the following: European
	Standard EN 689 (Workplace atmospheres - Guidance for the assessment
	of exposure by inhalation to chemical agents for comparison with limit
	values and measurement strategy) European Standard EN 14042
	(Workplace atmospheres - Guide for the application and use of
	procedures for the assessment of exposure to chemical and biological
	agents) European Standard EN 482 (Workplace atmospheres - General
	requirements for the performance of procedures for the measurement of
	chemical agents) Reference to national guidance documents for methods
	for the determination of hazardous substances will also be required.

DNELs/DMELs

No DNELs/DMELs available

PNECs No PNECs available



8.2 Exposure controls

Appropriate	If user operations generate dust, fumes, gas, vapor or mist, use process		
engineering controls	enclosures, local exhaust ventilation or other engineering controls to keep		
	worker exposure to airborne contaminants below any recommended or		
	statutory limits.		

Individual protection measures

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.
Eye/face 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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

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. Considering the parameters
	specified by the glove manufacturer, check during use that the gloves are
	still retaining their protective properties. It should be noted that the time
	to breakthrough for any glove material may be different for different
	glove manufacturers. In the case of mixtures, consisting of several
	substances, the protection time of the gloves cannot be accurately
	estimated.

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Body protection	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.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
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

9.1 Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Colour	Not available
Odour	Not available
Odour threshold	Not available
рН	Not available
Melting point/freezing point	Not available
Initial boiling point and boiling range	Not available
Flash point	Not available



Evaporation rate Not available Flammability (solid, gas) Not available **Upper/lower flammability or explosive limits** Not available Not available Vapour pressure Not available Vapour density **Relative density** Not available Solubility(ies) Not available Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available **Decomposition temperature** Not available Viscosity Not available **Explosive properties** Not available Not available **Oxidising properties**

9.2 Other information

Solubility in water

Not available

No additional information

10. Stability and reactivity

10.1 Reactivity	No specific test data related to reactivity available		
	for this product or its ingredients.		
10.2 Chemical stability	The product is stable		
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use,		
	hazardous reactions will not occur.		
10.4 Conditions to avoid	No specific data		



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10.5 Incompatible materials	No specific data.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information

11.1 Information on toxicological effects Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Phosphoric acid	LD50 Dermal LD50 Oral	Rabbit Rat	2740 mg/1530 mg/kg	-
Conclusion summary		Not available		
Acute toxicity estimates		Not available		
Irritation/Corrosion				
Conclusion/Summary		Not available		
Sensitisation				
Conclusion/Summary		Not available		
Mutagenicity				
Conclusion/Summary		Not available		
Carcinogenicity				
Conclusion/Summary		Not available		
Reproductive toxicity				
Conclusion/Summary		Not available		
Teratogenicity				
Conclusion/Summary		Not available		



Specific target organ toxicity (single exposure) Not available

Specific target organ toxicity (repeated exposure) Not available

Aspiration hazard Not available

Information on the likely routes of exposure Not available

Potential health effects

Eye contact	Causes serious eye damage
Inhalation	No known significant effects or critical hazards
Skin contact	Causes severe burns
Ingestion	Harmful if swallowed

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	Adverse symptoms may include the following:
	pain
	watering
	redness
Inhalation	No specific data
Skin contact	Adverse symptoms may include the following:
	pain or irritation
	redness
	blistering may occur
Ingestion	Adverse symptoms may include the following:
	stomach pains

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Short term exposure	
Potential immediate effects	Not available
Potential delayed effects	Not available
Long term exposure	
Potential immediate effects	Not available
Potential delayed effects	Not available
Potential chronic health effects	Not available
Conclusion/Summary	Not available
General	No known significant effects or critical hazards
Carcinogenicity	No known significant effects or critical hazards
Mutagenicity	No known significant effects or critical hazards
Teratogenicity	No known significant effects or critical hazards
Developmental effects	No known significant effects or critical hazards
Fertility effects	No known significant effects or critical hazards
Other information	To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.



12. Ecological information

12.1 Toxicity Conclusion/Summary - Not available

12.2 Persistence and degradability Conclusion/Summary - Not available

12.3 Bioaccumulative potential - Not available

12.4 Mobility in soilSoil/water partition coefficient (Koc) - Not availableMobility - Not available

12.5 Results of PBT and vPvB assessmentPBT - Not applicablevPvB - Not applicable

12.6 Other adverse effects - No known significant effects or critical hazards

13. Disposal considerations	

The information in this section contains generic advice and guidance. Surclean should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal	The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with
	jurisdiction.



Hazardous waste	The classification of the product may meet the criteria for a
	hazardous waste.

Packaging

Methods of disposal	The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
Special precautions	This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	1805	1805	1805	1805
14.2 UN proper shipping name	Phosphoric acid, solution	Phosphoric acid, solution	Phosphoric acid, solution	Phosphoric acid, solution
14.3 Transport hazard class(es)				
14.4 Packing group	Ú	III	ú	III
14.5 Environmental hazards	No	No	No	No
Additional information	-		-	-



14.6 Special precautions for	Transport within user's premises: always transport in closed
user	containers that are upright and secure. Ensure that persons
	transporting the product know what to do in the event of an accident or spillage.
14.7 Transport in bulk	
according to Annex II of	NT / 111
MARPOL and the IBC Code	Not available

15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles - Not applicable.

Other EU regulations

Europe inventory - not determined.

Ozone depleting substances (1005/2009/EU) - Not listed.

Prior Informed Consent (PIC) (649/2012/EU) - Not listed.

Seveso Directive - This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals - Not listed.

Montreal Protocol (Annexes A, B, C, E) - Not listed.

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Stockholm Convention on Persistent Organic Pollutants - Not listed. **Rotterdam Convention on Prior Informed Consent (PIC)** - Not listed. **UNECE Aarhus Protocol on POPs and Heavy Metals** - Not listed.

International lists National inventory

Australia	Not determined.
Canada	Not determined.
China	Not determined.
Japan	Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	Not determined.
New Zealand	Not determined.
Philippines	Not determined.
Republic of Korea	Not determined.
Taiwan	Not determined.
Turkey	Not determined.
United States	All components are listed or exempted.
15.2 Chemical Safety Assessment	This product contains substances for which Chemical Safety Assessments are still required.
	Assessments are sun required.

16. Other information

Indicates information that has changed from previously issued version.



Abbreviations and acronyms	ATE = Acute Toxicity Estimate
	CLP = Classification, Labelling and Packaging Regulation
	[Regulation (EC) No. 1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302	Expert judgment
Skin Corr. 1A, H314	Expert judgment
Eye Dam. 1, H318	Expert judgment

Full text of abbreviated H statements

Classification	Justification
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.

Full text of classifications [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302 Eye Dam. 1, H318 Skin Corr. 1A, H314	ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category
	1 SKIN CORROSION/IRRITATION - Category 1A

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Notice to reader

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