SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: Stainless Steel Flux
Use: Flux for use in soldering stainless steel.
Supplier: ALM HM, Grange House, Geddings Road, Hoddesdon, Hertfordshire, EN11 0NT
TEL: 01992 801927
Email: sales@almhm.co.uk

1.2. Composition/Information on Ingredients

Identification	(EC) 1272/2008	67/548/EEC	Note	%
INDEX:015-011-00-6 CAS: 7664-38-2 EC: 231-633-2 PHOSPHORIC ACID	GHS05 Dgr Skin Corr. 1B, H314	C C;R34	B [1]	50 ≤ x% <100
CAS: 79-14-1 EC: 201-180-5 ACIDE HYDROXYACETIQUE	GHS07, GHS05 Dgr Acute Tox. 4, H302 Skin Corr. 1B, H314	C C;R34 Xn;R22	N/A	2.5 ≤ x% <10

[1] Substance for which maximum workplace exposure limits are available

SECTION 2: Hazards Identification

2.1. Classification of Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]: Skin corrosion, Category 1B (Skin Corr. 1B, H314)
Classification according to Directive 1999/EC [DPD]: Corrosive (C, R 34)
Physicochemical Hazards: This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
Human Health Hazards: This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.
Environmental Hazards: This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label Elements

Hazard Pictograms: GHS05



Signal Word: DANGER
Product Identifiers: 015-011-00-6 PHOSPHORIC ACID
Hazard Statements: H314 Causes severe skin burns and eye damage.

2.2.1. Precautionary Statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

Prevention: P280 Wear protective gloves, protective clothing, eye protection and face protection.
Response: P303, P361 & P353 IF ON SKIN (or hair), take off immediately all contaminated clothing and rinse skin with water/shower.
P305, P351 & P338 IF IN EYES, rinse cautiously with water for several minutes. If present and easy to do, remove contact lenses. Continue rinsing.
Storage: No data available.
Disposal: P501 Discard content/container according to applicable regulations.
Hazardous Ingredients: The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) ≤ 0.1% published by the European Chemicals Agency (ECHA) under article of REACH: http://echa.europa.eu/fr/candidate-list-table
Supplemental Label Elements: No data available.
Annex XVII – Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Mixtures and Articles: The mixture satisfies neither the PBT nor the vPvB criteria.

2.3. Other Hazards

No data available.

SECTION 3: First Aid Measures

3.1. Description of First Aid Measures

As a general rule, in case of doubt, or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

First Aid Measures After Inhalation: No data available.
First Aid Measures After Skin Contact: Remove any soiled or splashed clothing immediately. Watch out for any remaining product between skin and clothing, watches, shows, etc. If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.
First Aid Measures After Eye Contact: Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open. Regardless of the initial state, refer the patient to an ophthalmologist and show them the label.
First Aid Measures After Ingestion: Do not give patient anything orally. In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor. Keep the person exposed at rest. Do not force vomiting. Seek medical attention immediately, showing the label. If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

3.1.1. Protection of First Aiders

No data available.

3.2. Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/Effects: No data available.
Symptoms/Effects After Inhalation: No data available.
Symptoms/Effects After Skin Contact: No data available.
Symptoms/Effects After Eye Contact: No data available.
Symptoms/Effects After Ingestion: No data available.

3.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

No data available.

SECTION 4: Firefighting Measures

Material is non-flammable.

4.1. Extinguishing Media

Suitable Extinguishing Media: Sprayed water or water mist, foam, multipurpose ABC powder, BC powder, carbon dioxide.
Unsuitable Extinguishing Media: Water jet.

4.2. Hazards Arising from the Substance or Mixture

Hazards from the Substance or Mixture: A fire will often produce a thick black smoke. Exposure decomposition products may be hazardous to health. Do not breathe in smoke.
Hazardous Thermal Decomposition Products: carbon monoxide (CO), carbon dioxide (CO2).

4.3. Advice for Firefighters

Special Protective Actions for Firefighters: No data available.
Special Protective Equipment for Firefighters: No data available.

SECTION 5: Accidental Release Measures

5.1. Personal Precautions, Protective Equipment and Emergency Procedures

For Non-Emergency Personnel: Avoid any contact with the skin and eyes.
For Emergency Responders: Wear suitable personal protective equipment.

5.2. Environmental Precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal. Prevent any material from entering drains or waterways.

5.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain and control the leaks or spills with non-combustible absorbent materials in drums for waste disposal.
Methods for Cleaning Up: Clean preferably with a detergent, do not use solvents.

SECTION 6: Handling and Storage

6.1. Precautions for Safe Handling

Protective Measures: Ensure that there is adequate ventilation, especially in confined areas. Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly. Prevent access by unauthorised personnel. Observe precautions stated on label as well as industrial safety regulations. No smoking, eating or drinking in areas where the mixture is used.
Hygiene Measures: Always wash hands after handling. Remove and wash contaminated clothing before re-using.

6.2. Conditions for Safe Storage, Including any Incompatibilities

Keep out of reach of children. Keep the container tightly closed in a dry, well-ventilated place. The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area. Packages which have been opened must be reclosed carefully and stored in an upright position. Always keep in packing made of an identical material to the original.

6.3. Specific End Use(s)

No data available.

SECTION 7: Exposure Controls/Personal Protection

7.1. Control Parameters

Occupational Exposure Limits:

	European Union (2009/161/EU, 2006/15/EC, 2000/39/EC, 98/24/EC)	ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010)	France (INRS – ED984:2008)	UK/WEL (Workplace Exposure Limits, EH40/2005, 2007)
CAS	7664-38-2	7664-38-2	7664-38-2	7664-38-2
VME-mg/m³	N/A	N/A	1	N/A
VME-ppm	1	N/A	0.2	N/A
VLE-ppm	2	N/A	0.5	N/A
TWA	N/A	1mg/m³	N/A	1mg/m³
STEL	N/A	3mg/m³	N/A	2mg/m³

Recommended Monitoring Procedures: No data available.
Air Contaminants Formed: No data available.
Control Banding: No data available.
DNEL and PNEC: No data available.

7.2. Exposure Controls

Appropriate Engineering Controls: No data available.
Thermal Hazards: No data available.
Environmental Exposure Controls: No data available.

7.2.1. Individual Protection Measures

Personal Protective Equipment Symbol(s):
Hygiene Measures: Use personal protective equipment that is clean and has been properly maintained. Store personal protective equipment in a clean place, away from the work area. Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.
Hand Protection: Wear suitable protective gloves in the event of prolonged or repeated skin contact. Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN374. Gloves must be selected according to the application and duration of use at the workstation. Protective gloves need to be selected according to their suitability for the workstation in question e.g. other chemical products that may be handled, necessary physical protections, level of dexterity required. Types of gloves recommended include impervious nitrite rubber gloves that meet standard EN374.
Body Protection: Avoid skin contact. Wear suitable protective clothing. In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact. In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact. Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use. Work clothing worn by personnel shall be laundered regularly. After contact with the product, all parts of the body that have been soiled must be washed.
Other Skin Protection: No data available.
Eye/Face Protection: Avoid contact with eyes. Before handling, wear safety goggles with protective sides in accordance with standard EN166. Use eye protectors designed to protect against liquid splashes. In the event of high danger, protect the face with a shield. Prescription glasses are not considered as protection. Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours. Provide eyewash stations in facilities where the product is handled constantly.
Respiratory Protection: No data available.

SECTION 8: Physical and Chemical Properties

Physical State: Viscous liquid
Colour: No data available.
Odour: No data available.
Odour Threshold: No data available.
pH: Not applicable.
Melting Point: Not applicable.
Freezing Point: No data available.
Boiling Point: Not applicable.
Flash Point: Not applicable
Evaporation Rate: No data available.
Flammability: No data available.
Vapour Pressure: No data available.
Density: > 1
Solubility: Insoluble
Particion Coefficient n-octanol/water: No data available.
Auto-Ignition Temperature: No data available.
Decomposition Temperature: Not applicable.
Viscosity: v<7mm²/s (40°C)
Explosive Properties: No data available.
Oxidising Properties: No data available.
Explosive Limits: No data available.
Other Information: No data available.

SECTION 9: Stability and Reactivity

Reactivity: No data available.
Chemical Stability: The mixture is stable under the recommended handling and storage conditions.
Possibility of Hazardous Reactions: When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide
Conditions to Avoid: No data available.
Incompatible Materials: No data available.
Hazardous Decomposition Products: The thermal decomposition may release/form carbon monoxide (CO) and carbon dioxide (CO2).

SECTION 10: Toxicological Information

10.1. Information on Toxicological Effects

Acute Toxicity: No data available.
Skin Irritation/Corrosion: May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour. Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.
Serious Eye Damage/Irritation: No data available.
Respiratory or Skin Sensitisation: No data available.
Germ Cell Mutagenicity: No data available.
Carcinogenicity: No data available.
Reproductive Toxicity: No data available.
Teratogenicity: No data available.
Specific Target Organ Toxicity (single exposure): No data available.
Specific Target Organ Toxicity (repeated exposure): No data available.
Aspiration Hazard: No data available.
STOT – Single Exposure: No data available.

10.2. Information on the Likely Routes of Exposure

No data available.

10.3. Potential Acute Health Effects

Eye Contact: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Ingestion: No data available.

10.4. Symptoms Related to the Physical, Chemical and Toxicological Characteristics

Eye Contact: No data available.
Inhalation: No data available.
Skin Contact: No data available.
Ingestion: No data available.

10.5. Potential Delayed, Immediate and Chronic Effects from Short- and Long-Term Exposure

10.5.1. Short Term Exposure

Immediate Effects: No data available.
Delayed Effects: No data available.

10.5.2. Long Term Exposure

Immediate Effects: No data available.
Delayed Effects: No data available.

10.5.3. Potential Chronic Health Effects

No data available.

10.6. Conclusion/Summary

General: No data available.
Carcinogenicity: No data available.
Mutagenicity: No data available.
Teratogenicity: No data available.
Developmental Effects: No data available.
Fertility Effects: No data available.
Other Information: No data available.

SECTION 11: Ecological Information

Toxicity: No data available.
Persistence and Degradability: No data available.
Bio accumulative Potential: No data available.
Mobility in Soil: No data available.
Results of PBT and vPvB Assessment: No data available.
Other Adverse Effects: No data available.

SECTION 12: Disposal Considerations

12.1. Waste Treatment Methods

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

12.1.1. Product

Methods of Disposal: Do not pour into drains or waterways. Waste management is carried out without endangering human health, without harming the environment and, in particular, without risk to water, air, soil, plants or animals. Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company. Do not contaminate the ground or water with waste, do not dispose of waste into the environment.
Hazardous Waste: No data available.

12.1.2. Packaging

Methods of Disposal: Empty container completely. Keep label(s) on container. Give to a certified disposal contractor.
Special Precautions: No data available.

SECTION 13: Transport Information:

13.1. Transport Information

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2013 – IMDG 2012 – ICAO/IATA 2014).

UN Number: 1760
UN Proper Shipping Name: UN1760=CORROSIVE LIQUID, N.O.S (phosphoric acid…%)
Transport Hazard Class(es):



Packing Group: II
Environmental Hazards: No data available.

13.2. Special Precautions for User

	ADR/RID	IMDG	IATA	
Class	8	8	8	8
Code	C9	N/A	N/A	N/A
Pack gr.	II	II	II	II
Label	8	N/A	N/A	N/A
Ident.	80	N/A	N/A	N/A
LQ	1L	1L	N/A	N/A
EMS	N/A	F-A, S-B	N/A	N/A
Passager	N/A	N/A	851	Y840
Passager	N/A	N/A	1L	0.5L
Cargo	N/A	N/A	855	30L
Cargo	N/A	N/A	N/A	N/A
Provis.	274	274	N/A	N/A
note	N/A	N/A	A3, A803	A3, A803
EQ	E2	E2	E2	E2
Cat.	2	N/A	N/A	N/A
Tunnel	E	N/A	N/A	N/A

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.
For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

13.3. Transport in Bulk according to Annex II of MARPOL and the IBC Code

No data available.

SECTION 14: Regulatory Information

14.1. Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

14.1.1. Regulations

Directive 67/548/EEC and its adaptations.
Directive 1999/45/EC and its adaptations.
EU Regulation No. 1271/2008 amended by EU Regulation No. 487/2013.
EU Regulation No. 1271/2008 amended by EU Regulation No. 758/2013.
EU Regulation No. 1271/2008 amended by EU Regulation No. 944/2013.
EU Regulation No. 1271/2008 amended by EU Regulation No. 605/2014.

14.1.2. Container Information

Packaging to be fitted with child-resistant fastenings (see EC Regulation No. 1272/2008, Annex II, Part 3).
Containers to be fitted with a tactile warning of danger (see EC Regulation No. 1272/2008, Annex II, Part 3).

14.1.3. Provisions

No data available.

14.2. Chemical Safety Assessment

No data available.

SECTION 15: Other Information

Since the user's working conditions are not known by the supplier, the information supplied on this safety data sheet is based on the supplier's current level of knowledge and on national and community regulations. The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions. It is always the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations. The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

15.1. In Compliance with Directives 67/548/EEC, 1999/45/EC and their Amendments

Hazard Symbols:



Contains: 015-011-00-6 PHOSPHORIC ACID
Risk Phrase: R34 causes burns

15.1.1. Safety Phrase

S 1/2: Keep locked up and out of the reach of children.
S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 36/37/39: Wear suitable protective clothing, gloves and eye/face protection.
S 45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 25: Avoid contact with eyes.
S 27: Take off immediately all contaminated clothing.
S 28: After contact with skin, wash immediately with plenty of soapy water.
S 64: If swallowed, rinse mouth with water (only if the person is conscious).
S 20: When using do not eat or drink.

15.2. Wording of the Phrases Mentioned in Sections 1 & 2

H302: Harmful if swallowed.
R 22: Causes severe skin burns and eye damage.
R 22: Harmful if swallowed.
R 34: Causes burns.

15.3. Abbreviations

ADR: European agreement concerning the international carriage of dangerous goods by Road.
IMDG: International Maritime Dangerous Goods.
IATA: International Air Transport Association.
ICAO: International Civil Aviation Organisation.
RID: Regulations concerning the International carriage of Dangerous goods by rail.
WGK: Wassergefahrdungsklasse (Water Hazard Class).
GHS05: Corrosion.