

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND
COMPANY/UNDERTAKING****Product identifier****Product name:** AMCO 4772**Other means of identification****Product code:** 623**Recommended use of the chemical and restrictions on use****Recommended use:** Soldering Flux/Cleaning Solution**Details of the supplier of the safety data sheet****Manufacturer:** Force Industries Division.
28 Industrial Blvd. Paoli, PA 19301.**Emergency Telephone number**For hazardous materials incidents only, call CHEMTREC Emergency Response Number:
1-800-424-9300.

For all other questions about this product, call Force Industries Division at 610-647-3575.

Revision Date: May 4, 2017**Supersedes:** July 3, 2007**SECTION 2: HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Acute Toxicity (Oral), Category 2, H300

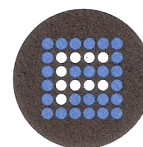
Eye damage/irritation, Category 1, H318

Skin corrosion/irritation, Category 2, H315

Specific target Organ toxicity single exposure, Category 3, H335

Hazard statement(s)

H300	Fatal if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation



2.2 GHS Label elements, including precautionary statements

Emergency overview

Appearance:	Water Clear
Physical state:	Liquid
Odor:	None
Signal Word:	DANGER

Precautionary statement(s)

P234	Keep only in original container
P260	Do not breathe dust/fumes/gas/mist/vapors/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312+P330 +P331	IF SWALLOWED: Call a POISON CENTER/ doctor and Rinse mouth. Do NOT induce vomiting.
P303+P361+P353 P304+P340	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 P332+P313 P337+P313	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Call a physician. If skin irritation occurs: Get medical advice/attention. If eye irritation persists get medical advice/attention.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P402	Store in a dry place
P403+P233 P405	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
P501	Dispose of contents/container to in accordance with local/regional/national/international regulation

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS –none.

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS No.</u>	<u>EINECS No.</u>	<u>Weight %</u>
Sodium Hydroxide	1310-73-2	215-185-5	<1%
Glycerine	56-81-5	200-289-5	5 – 20%

Others, if any, are non-hazardous and claimed as trade secret.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

EYES: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

SKIN: In case of contact, wash skin with plenty of soap and water. If rash develops, consult a physician. Wash contaminated clothing before reuse.

INGESTION: If swallowed, do not induce vomiting. Give large quantities of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

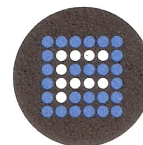
INHALATION: Remove to fresh air immediately and keep comfortable for breathing. Call a physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available



SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical.

5.2 Special hazards arising from the substance or mixture

Under conditions of fire, carbon monoxide and carbon dioxide are formed.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of according to EPA regulations. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

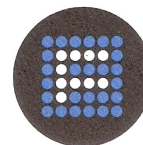
Wash thoroughly after handling to remove residue. Do not breathe fumes. Professionally wash contaminated clothing.

7.2 Conditions for safe storage, including any incompatibilities

Store flux at ambient conditions, keep extremely dry and controlled conditions. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Components	OSHA PEL	ACGIH
Glycerine	5 mg/m ³	10 mg/m ³
Sodium Hydroxide	2 mg/m ³	2 mg/m ³

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact:

Material: Suitable protective clothing. Rubber boots. Rubber gloves. Rubber apron.

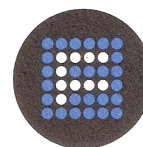
Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN(EU).

Control of environmental exposure Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance (physical state, color, etc.)	Water clear Liquid
Odor	None
pH	12 - 14
initial boiling point and boiling range	~212 ° F @ 760 mm Hg
evaporation rate	<1
upper/lower flammability or explosive limits	None
vapor pressure	N/E
relative density	1.032 H ₂ O =1 @ 72° F

SECTION 10: STABILITY AND REACTIVITY

10.1 Chemical stability

Stable under recommended storage conditions

10.2 Possibility of hazardous reactions

Will not occur / none

10.3 Incompatible materials

Some metals at room temperature

10.4 Hazardous decomposition products

Carbon monoxide and carbon dioxide

SECTION 11: TOXICOLOGICAL INFORMATION

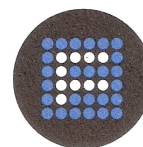
11.1 Component toxicity

Components	LC50/Inhalation	LC50/Dermal/Rat	LD50/Oral/Rat
Glycerine	No data available	>10,000 mg/kg	12,600 mg/kg
Sodium Hydroxide	No data available	No data available	No data available

11.2 Effects of Acute Overexposure:

- Inhalation: Can be irritating to lungs.
- Eyes: Can cause corneal damage and even blindness
- Skin Contact: If left on skin, can cause corrosion of the tissues.
- Ingestion: May be fatal if swallowed.

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11.3 Primary Route of Exposure:

Skin and inhalation

11.4 Effects of Chronic Exposure:

Can have a corrosive effect on skin and lungs

11.5 Target Organs:

Skin and lungs

11.6 Reproductive Effects

No data available

11.7 Carcinogenicity:

No data available

SECTION 12: ECOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Components	LC50/96hr/48hr/24hr	EC50/96/48hr/24hr	Bioaccumulation Concentration Factor	No Observable Effect Concentration/96hr/48hr/24hr
Glycerine	>5000 mg/l – Carassius auratus (24 hr)	10000 mg/l – Daphnia Magna (24 hr)	Value: 3.16 Method (OECD 305C)	No data available
Sodium Hydroxide	No data available	No data available	No data available	No data available

12.2 Persistence and degradability

Glycerin is reported to be readily biodegradable. It is not likely that sodium hydroxide would have short term degradation, but long term degradation products may arise.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

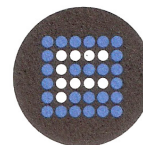
Glycerin and sodium hydroxide are both soluble in water

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

12.6 Other adverse effects

No data available

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

RCRA: D002

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION

Department of Transportation: Domestic Ground
UN Proper shipping name: Sodium hydroxide solution
Transport Hazard class(es): 8, Corrosive

Packing group, if applicable. UN 1824, PG II

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises. ERG No. 154

SECTION 15: REGULATORY INFORMATIONSARA Title III Section 311/312 Hazard Categories:

Acute Health Hazard
Chronic Health Hazard

SARA Title III 313 Reportable Substances

If listed below components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

Sodium Hydroxide - CAS#: 1310-73-2

Toxic Substance Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification Section 12 (b) of TSCA:
None listed

California Proposition 65

This product does not contain a chemical known in the State of California that causes cancer.

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Chemical Inventory Status

Unless otherwise noted; this product is compliant with the inventory listings of the countries shown below. For information listings for countries not shown, contact the Product Regulatory Department.

Canada - DSL (Domestic Substance List): All raw materials used in this product are listed on DSL

USA - TSCA (TOXIC SUBSTANCE CONTROL ACT): All raw materials used in this product are listed on TSCA Inventory.

Europe - All raw materials used in this product are listed on EINECS Inventory.

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Toxicity (Oral)	Acute toxicity (oral), Category 2
H315	Skin irritant, Category 2
H335	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H300	Fatal if swallowed
H318	Eye irritant, Category 1

HMIS:

Health: 2

Flammability: 0

Reactivity: 0

PREPARATION INFORMATION: Technical Service Department, Force Industries Division

DISCLAIMER: The data set forth in these sheets are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the aforementioned product. Force Industries makes no warranty with respect to the accuracy of the information provided by their suppliers, and disclaims all liability of reliance thereon. Force Industries warrants only that its products conform to their published specifications and no other express warranty is made with regards thereof. We do not guarantee favorable results, and we assume no liability in connection with the use of the products. They are intended for use by persons having technical skill and knowledge, at their own discretion and risk.