Acidetch 12

Safety Data Sheet

According to REACH Regulation (EC) No 1907/2006, as retained and amended in UK law.
Issue date: 11/1/2024 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	:	Mixture
Product name	:	Acidetch 12
Product code	:	A1015
Product group	:	Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec	:	Industrial For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer
Cambrian Solvents Ltd
Mochdre Industrial Estate
SY16 4LE Newtown – Powys
Wales
T 01686 627 158

1.4. Emergency telephone number

Emergency number	:	01686 627 158

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to GB CLP (SI 2019:720 as amended)

Skin corrosion/irritation, Category 1	H314
Serious eye damage/eye irritation, Category 1	H318

Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to GB CLP (SI 2019:720 as amended)

Hazard pictograms (GB CLP) :



GHS05

Signal word (GB CLP)	:	Danger
Contains	:	Phosphoric Acid 75%; ammonium bifluoride; ammonium hydrogen difluoride
Hazard statements (GB CLP)	:	H314 - Causes severe skin burns and eye damage.
Precautionary statements (GB CLP)	:	P260 - Do not breathe vapours. P264 - Wash hands, forearms and face thoroughly after handling. P280 - Wear protective clothing, eye protection, face protection. P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.

2.3. Other hazards

Component	
Substance(s) not meeting the PBT criteria of UK REACH regulation, in accordance with Annex XIII	Phosphoric Acid 75% (7664-38-2), ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7), 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)
Substance(s) not meeting the vPvB criteria of UK REACH regulation, in accordance with Annex XIII	Phosphoric Acid 75% (7664-38-2), ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7), 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)

Component	
Substance(s) not included in the list established in accordance with Article 59(1) of UK REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in GB BPR and GB PPP	Phosphoric Acid 75%(7664-38-2), 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether(112-34-5), ammonium bifluoride; ammonium hydrogen difluoride(1341-49-7)

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to GB CLP (SI 2019:720 as amended)
Phosphoric Acid 75%	CAS-No.: 7664-38-2 EC-No.: 231-633-2 UK Index-No.: 015-011-00-6 REACH-no: 01-2119485924-24	30 – 50	Skin Corr. 1, H314 Eye Dam. 1, H318
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	CAS-No.: 112-34-5 EC-No.: 203-961-6 UK Index-No.: 603-096-00-8 REACH-no: 01-2119475104-44XXXX	< 10	Eye Irrit. 2, H319
ammonium bifluoride; ammonium hydrogen difluoride	CAS-No.: 1341-49-7 EC-No.: 215-676-4 UK Index-No.: 009-009-00-4 REACH-no: 01-2119489180-38	< 10	Acute Tox. 3 (Oral), H301 (ATE=100 mg/kg bodyweight) Skin Corr. 1B, H314

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Phosphoric Acid 75%	CAS-No.: 7664-38-2 EC-No.: 231-633-2 UK Index-No.: 015-011-00-6 REACH-no: 01-2119485924-24	(10 ≤ C < 25) Skin Irrit. 2; H315 (10 ≤ C < 25) Eye Irrit. 2; H319 (25 ≤ C ≤ 100) Skin Corr. 1B; H314
ammonium bifluoride; ammonium hydrogen difluoride	CAS-No.: 1341-49-7 EC-No.: 215-676-4 UK Index-No.: 009-009-00-4 REACH-no: 01-2119489180-38	(0.1 ≤ C < 1) Skin Irrit. 2; H315 (0.1 ≤ C < 1) Eye Irrit. 2; H319 (1 ≤ C ≤ 100) Skin Corr. 1B; H314

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation : Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact : Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/effects after skin contact : Causes severe burns.
Symptoms/effects after eye contact : Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically. In case of skin contact, wearing rubber gloves rub 2.5% calcium gluconate gel continuously into the affected area for 1.5 hours or until further medical care is available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Clean up any spills as soon as possible, using an absorbent material to collect it.

6.1.1. For non-emergency personnel

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Phosphoric Acid 75% (7664-38-2)	
United Kingdom - Occupational Exposure Limits	
Local name	Orthophosphoric acid
WEL TWA (OEL TWA)	1 mg/m³
WEL STEL (OEL STEL)	2 mg/m³
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	
United Kingdom - Occupational Exposure Limits	
Local name	2-(2-Butoxyethoxy)ethanol
WEL TWA (OEL TWA)	67.5 mg/m³
	10 ppm
WEL STEL (OEL STEL)	101.2 mg/m³
	15 ppm
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:
Provide local exhaust or general room ventilation.

8.2.2. Personal protection equipment

Personal protective equipment:
Avoid all unnecessary exposure.
Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:
Chemical goggles or safety glasses

Eye protection			
Type	**Field of application**	**Characteristics**	**Standard**
Face shield, Safety glasses, Safety goggles	Droplet	clear	

8.2.2.2. Skin protection

Skin and body protection	
Type	**Standard**
apron, Tyvek® Gown/Coveralls	

Hand protection:
Wear protective gloves.

Hand protection					
Type	**Material**	**Permeation**	**Thickness (mm)**	**Penetration**	**Standard**
Reusable gloves	Polyvinylchloride (PVC), Nitrile rubber (NBR)	2 (> 30 minutes)		1 (< 4.0)	

Other skin protection
Materials for protective clothing:
Wear protective clothing

8.2.2.3. Respiratory protection

Respiratory protection:
Wear appropriate mask

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Other information:
Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Liquid
Appearance	:	Clear, colorless liquid.

Colour	:	clear. Colourless.
Odour	:	characteristic.
Odour threshold	:	Not available
pH	:	< 2
Melting point	:	Not available
Freezing point	:	Not available
Boiling point	:	< 100 °C
Flash point	:	> 100 °C
Explosive limits	:	Not available
Vapour pressure	:	Not available
Vapour pressure at 50°C	:	Not available
Relative vapour density at 20°C	:	Not available
Relative density	:	1.24
Density	:	Not available
Solubility	:	Not available
Partition coefficient n-octanol/water (Log Kow)	:	Not available
Auto-ignition temperature	:	Not available
Decomposition temperature	:	Not available
Viscosity, kinematic	:	Not available
Explosive properties	:	Not available

9.2. Other information

Particle characteristics : Not applicable

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (dermal)	:	Not classified (Based on available data, the classification criteria are not met)
Acute toxicity (inhalation)	:	Not classified (Based on available data, the classification criteria are not met)
Skin corrosion/irritation	:	Causes severe skin burns. pH: < 2

Phosphoric Acid 75% (7664-38-2)	
pH	< 1

ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7)	
pH	3.5

Serious eye damage/irritation : Causes serious eye damage.
pH: < 2

Phosphoric Acid 75% (7664-38-2)	
pH	< 1

ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7)	
pH	3.5

Respiratory or skin sensitisation : Not classified (Based on available data, the classification criteria are not met)
Germ cell mutagenicity : Not classified (Based on available data, the classification criteria are not met)
Carcinogenicity : Not classified (Based on available data, the classification criteria are not met)
Reproductive toxicity : Not classified (Based on available data, the classification criteria are not met)
STOT-single exposure : Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard : Not classified (Based on available data, the classification criteria are not met)

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	
Viscosity, kinematic	6282.723 mm²/s

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

No additional information available

11.2.2. Other information

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short–term (acute) : Not classified (Based on available data, the classification criteria are not met)
Hazardous to the aquatic environment, long–term (chronic) : Not classified (Based on available data, the classification criteria are not met)

12.2. Persistence and degradability

Acidetch 12	
Persistence and degradability	Not established.

Phosphoric Acid 75% (7664-38-2)	
Persistence and degradability	Rapidly degradable

ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7)	
Persistence and degradability	Rapidly degradable

2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Acidetch 12	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Component	
Phosphoric Acid 75% (7664-38-2)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
ammonium bifluoride; ammonium hydrogen difluoride (1341-49-7)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII
2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether (112-34-5)	This product does not contain substances at ≥0.1% that meet the PBT criteria of UK REACH regulation, annex XIII This product does not contain substances at ≥0.1% that meet the vPvB criteria of UK REACH regulation, annex XIII

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecological waste information : Avoid release to the environment.

SECTION 14: Transport information

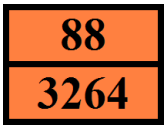
In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3264	UN 3264	UN 3264	UN 3264	UN 3264
14.2. UN proper shipping name				
CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride)	Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride)	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride)

ADR	IMDG	IATA	ADN	RID
Transport document description				
UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride), 8, I, (E)	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride), 8, I	UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride), 8, I	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride), 8, I	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (CONTAINS ; Phosphoric Acid 75% ; ammonium bifluoride; ammonium hydrogen difluoride), 8, I
14.3. Transport hazard class(es)				
8	8	8	8	8
				
14.4. Packing group				
I	I	I	I	I
14.5. Environmental hazards				
Dangerous for the environment: False	Dangerous for the environment: False Marine pollutant: No	Dangerous for the environment: False	Dangerous for the environment: False	Dangerous for the environment: False
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	C1
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	0
Excepted quantities (ADR)	:	E0
Packing instructions (ADR)	:	P001
Mixed packing provisions (ADR)	:	MP8, MP17
Portable tank and bulk container instructions (ADR)	:	T14
Portable tank and bulk container special provisions (ADR)	:	TP2, TP27
Tank code (ADR)	:	L10BH
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	1
Special provisions for carriage - Operation (ADR)	:	S20
Hazard identification number (Kemler No.)	:	88
Orange plates	:	
Tunnel restriction code (ADR)	:	E
EAC code	:	2X
APP code	:	B

Transport by sea

Special provisions (IMDG)	:	274
Packing instructions (IMDG)	:	P001
Tank instructions (IMDG)	:	T14
Tank special provisions (IMDG)	:	TP2, TP27
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B

Stowage category (IMDG)	:	B
Stowage and handling (IMDG)	:	SW2
Properties and observations (IMDG)	:	Causes burns to skin, eyes and mucous membranes.

Air transport

PCA Excepted quantities (IATA)	:	E0
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	850
PCA max net quantity (IATA)	:	0.5L
CAO packing instructions (IATA)	:	854
CAO max net quantity (IATA)	:	2.5L
Special provisions (IATA)	:	A3
ERG code (IATA)	:	8L

Inland waterway transport

Classification code (ADN)	:	C1
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	0
Excepted quantities (ADN)	:	E0
Carriage permitted (ADN)	:	T
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

Rail transport

Classification code (RID)	:	C1
Special provisions (RID)	:	274
Limited quantities (RID)	:	0
Excepted quantities (RID)	:	E0
Packing instructions (RID)	:	P001
Mixed packing provisions (RID)	:	MP8, MP17
Portable tank and bulk container instructions (RID)	:	T14
Portable tank and bulk container special provisions (RID)	:	TP2, TP27
Tank codes for RID tanks (RID)	:	L10BH
Special provisions for RID tanks (RID)	:	TU38, TE22
Transport category (RID)	:	1
Hazard identification number (RID)	:	88

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

UK REACH Annex XVII (Restriction List)

UK restriction list (REACH Annex XVII)

Reference code	Applicable on	Entry title or description
3(b)	Acidetch 12 ; Phosphoric Acid 75% ; 2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10

UK restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
55.	2-(2-butoxyethoxy)ethanol; diethylene glycol monobutyl ether	2-(2-butoxyethoxy)ethanol (DEGBE)

UK REACH Annex XIV (Authorisation List)

This product contains no substance(s) listed on UK REACH Annex XIV (Authorisation List) equal to or above the 0.1% level of disclosure

UK REACH Candidate List (SVHC)

Contains no substance(s) listed on the UK REACH Candidate List

GB PIC regulation (Prior Informed Conset)

This product contains no substance(s) listed on the GB PIC List equal to or above the level of SDS disclosure

POP Regulation (Persistent Organic Pollutants)

This product contains no substance(s) listed on the GB POP List equal to or above the level of SDS disclosure

Ozone Regulation (S.I. No. 168 of 2015)

This product contains no substance(s) listed on the GB Ozone Depletion List equal to or above the level of SDS disclosure

Control of Poisons and Explosives Precursors Act

This product contains substance(s) listed on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure: Ammonium bifluoride - 1341-49-7
This product contains no substance(s) listed as a regulated poison on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure
This product contains no substance(s) listed as a reportable explosive precursor on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure
This product contains substance(s) listed on the Control of Poisons and Explosives Precursors Regulations equal to or above the level of SDS disclosure: Phosphoric acid - 7664-38-2 (30 % w/w)

Drug Precursors Regulation (273/2004)

This product contains no substance(s) listed on the GB Drug Precursors List equal to or above the level of SDS disclosure

15.1.2. Other Information

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Other information : None.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
Skin Corr. 1	Skin corrosion/irritation, Category 1

Full text of H- and EUH-statements:	
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Safety Data Sheet (SDS), UK

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.