

Material Safety Data Sheet 1907/2006/EC, Article 31 MPEX ETCH PRIMER AEROSOL 500ml

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

1.1. Product identifier

Product name MPEX® Etch Primer aerosol 500ml

Product number EP500

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

Identified uses Aerosol / Paint / Primer

1.3. Details of the supplier of the safety data sheet

Supplier Leading Solvent Supplies Ltd
Marston Business Park, Rudgate, Tockwith, YO26 7QF United Kingdom
Tel: +44 (0) 1423 358000

1.4. Emergency telephone number

Emergency telephone +44 (0) 1423 358000 (Hours 09:00 - 17:00 Mon to Fri)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Aerosol 1 - H222, H229

Health hazards Eye Irrit. 2 - H319 STOT SE 3 - H336

Environmental hazards Harmful to aquatic life with long lasting effect - H412

Classification (67/548/EEC or 1999/45/EC) F+; R12. Xi; R36. R66, R67

Human health Vapours and spray/mists in high concentrations are narcotic. See Section 11 for additional information on health hazards.

Environmental The product is not expected to be hazardous to the environment.

Physicochemical Containers can burst violently or explode when heated, due to excessive pressure build-up. The product is extremely flammable. Vapours may form explosive mixtures with air.

2.2 Label elements

Pictogram



Signal word Danger

Hazard statements H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements: P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P260 Do not breathe spray.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
P501 Dispose of contents / container in accordance with regional regulations.

Supplemental label Information: EUH066 Repeated exposure may cause skin dryness or cracking.

Supplementary precautionary statements: P264 Wash contaminated skin thoroughly after handling.
P337+P313 If eye irritation persists: Get medical advice/ attention.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

2.3 other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ACETONE	CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49	Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	25 - 50%
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N-BUTYL ACETATE	CAS: 123-86-4 EINECS: 204-658-1 Index number: 607-025-00-1 Reg.nr.: 01-2119485493-29	Flam. Liq. 3, H226 STOT SE 3, H336	10 - 12.5%
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PROPANE	CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21	Flam. Gas 1, H220 Press. Gas C, H280	10 - 12.5%
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2-METHOXY-1-METHYLETHYL ACETATE	CAS: 108-65-6 EINECS: 203-603-9 Index number: 607-195-00-7 Reg.nr.: 01-2119475791-29	Flam. Liq. 3, H226	5 - 10%
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BUTANE	CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32	Flam. Gas 1, H220 Press. Gas C, H280	5 - 10%
ISOBUTANE	CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27	Flam. Gas 1, H220 Press. Gas C, H280	5 - 10%
BUTAN-1-OL	CAS: 71-36-3 EINECS: 200-751-6 Index number: 603-004-00-6 Reg.nr.: 01-2119484630-38	Flam. Liq. 3, H226 Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315; STOT SE 3, H335-H336	2.5 - 5%
CELLULOSE NITRATE	CAS: 9004-70-0	Flam. Sol. 1, H228	<2.5%
TRIZINC BIS (ORTHOPHOSPHATE)	CAS: 7779-90-0 EINECS: 231-944-3 Index number: 030-011-00-6 Reg.nr.: 01-2119485044-40	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	<1%
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The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.
Inhalation	Supply fresh air and to be sure call for a doctor. In case of unconsciousness place patient stably in side position for transportation.
Ingestion	Drink plenty of water and Rinse mouth thoroughly with water. Remove person to fresh air and keep comfortable for breathing. Get medical attention immediatly.
Skin contact	Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Rinse immediatly with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

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

General information No further relevant information available.

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

Notes for the doctor No further relevant information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media Foam, carbon dioxide or dry powder. Fight larger fires with water spray or alcohol resistant foam.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up. During heating or in case of fire poisonous gases are produced.

5.3. Advice for firefighters

Protective actions during firefighting Use water to keep fire exposed containers cool and disperse vapours. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Wear respiratory protective device.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid inhalation of vapours and contact with skin and eyes. Ensure suitable respiratory protection is worn during removal of spillages in confined areas. Keep unprotected persons away.

6.2. Environmental precautions

Environmental precautions Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Eliminate all sources of ignition. No smoking, sparks, flames or other sources of ignition near spillage. Provide adequate ventilation. Absorb in vermiculite, dry sand or earth and place into containers. Dispose contaminated material as waste according to item 13.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Keep away from heat, sparks and open flame. Read and follow manufacturer's recommendations. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited. Use suitable respiratory protection if ventilation is inadequate.

Advice on general occupational hygiene Wash promptly with soap and water if skin becomes contaminated. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Protect from freezing and direct sunlight. Store in a dry place. Do not store near heat sources or expose to high temperatures. Keep away from heat, sparks and open flame. Observe official regulations on storing packagings with pressurised containers.

7.3. Specific end use(s)

Specific end use(s) No further relevant information available.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ingredients with limit values that require monitoring at the workplace:

67-64-1 acetone

WEL

Short-term value: 3620 mg/m³, 1500 ppm

Long-term value: 1210 mg/m³, 500 ppm

123-86-4 n-butyl acetate

WEL

Short-term value: 966 mg/m³, 200 ppm

Long-term value: 724 mg/m³, 150 ppm

108-65-6 2-methoxy-1-methylethyl acetate

WEL

Short-term value: 548 mg/m³, 100 ppm

Long-term value: 274 mg/m³, 50 ppm

Sk

106-97-8 butane (containing $\geq 0,1$ % butadiene (203-450-8))

WEL

Short-term value: 1810 mg/m³, 750 ppm

Long-term value: 1450 mg/m³, 600 ppm

Carc (if more than 0.1% of buta-1.3-diene)

71-36-3 butan-1-ol

WEL

Short-term value: 154 mg/m³, 50 ppm

Sk

· Additional information: The lists valid during the making were used as basis.

8.2. Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Avoid contact with the eyes.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles

Respiratory protection

No specific recommendations. If ventilation is inadequate, suitable respiratory protection must be worn.



Protective gloves



Tightly sealed goggles

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance:

Form: Aerosol

Colour: Grey

Odour: Solvent-like

Odour threshold: Not determined.

pH-value: Not determined.

Change in condition:

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Not applicable, as aerosol.

Flash point: <0 °C (<32 °F) Not applicable, as aerosol.

Flammability (solid, gas): Not applicable.

Ignition temperature: 333 °C (631.4 °F)

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not selfigniting.

Explosive properties: Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.

Explosion limits:

Lower: 1.2 Vol %

Upper: 10.9 Vol %

Vapour pressure at 20 °C (68 °F): 3,500 hPa (2,625.2 mm Hg)

Density at 20 °C (68 °F): 0.77 g/cm³ (6.43 lbs/gal)

Relative density: Not determined.

Vapour density: Not determined.

Evaporation rate: Not applicable.

Solubility in / Miscibility with water: Not miscible or difficult to mix.

Partition coefficient: n-octanol/water: Not determined.

Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

Solvent content:

Organic solvents: 87.2 %

EU-VOC: 676.9 g/l

EU-VOC: in %: 87.17 %

Water: 0.3%

VOC (EC) ---

579.1 g/l

VOC-EU%: 69.18 %

Solids content: 11.6 %

9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No test data specifically related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stability The product may not be stable under some conditions of storage or use.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None known.

10.4. Conditions to avoid

Conditions to avoid: Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to avoid: None known.

10.6. Hazardous decomposition products

Hazardous decomposition products: None at ambient temperatures.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity Based on available data, the classification criteria are not met.
LD/LC50 values relevant for classification:

67-64-1 acetone

Oral LD50 5,800 mg/kg (rat)

Dermal LD50 >15,800 mg/kg (rabbit)

Inhalative LC50 / 4h 76 mg/l (rat)

123-86-4 n-butyl acetate

Oral LD50 10,800 mg/kg (rat)

Dermal LD50 >17,600 mg/kg (rabbit)

Inhalative LC50 / 4h 1.85 mg/l (rat)

108-65-6 2-methoxy-1-methylethyl acetate

Oral LD50 8,530 mg/kg (rat)

Dermal LD50 >5,000 mg/kg (rabbit)

Inhalative LC50 / 4 h >10,000 mg/m³ (rat)

71-36-3 butan-1-ol

Oral LD50 2,292 mg/kg (rat)

Dermal LD50 3,430 mg/kg (rabbit)

Primary irritant effect:

Skin corrosion/irritation Based on available data, the classification criteria are not met.

Serious eye damage/irritation.

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction).

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

STOT-single exposure.

May cause drowsiness or dizziness.

STOT-repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Ecological information on ingredients.

67-64-1 acetone
LC50/96h 8,300 mg/l (fish)
EC50/96h 7,200 mg/l (algae)
LC50 / 48 h 8,450 mg/l (crustacean (water flea))

123-86-4 n-butyl acetate
LC50 / 96 h 81 mg/l (fish)
108-65-6 2-methoxy-1-methylethyl acetate
EC50 / 48 h >500 mg/l (daphnia magna)
LC50 / 96 h 100-180 mg/l (oncorhynchus mykiss / Regenbogenforelle)

71-36-3 butan-1-ol
LC50 / 96 h 1,376 mg/l (fish)

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Ecotoxicological effects:

Remark: Harmful to fish

Additional ecological information: No further relevant information available.

General notes:

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

Harmful to aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Dispose of waste product or used containers in accordance with local regulations.

Disposal methods Containers should be thoroughly emptied before disposal because of the risk of an explosion.
Do not pierce or burn, even after use.

European waste catalogue

08 01 11* waste paint and varnish containing organic solvents or other hazardous substances

15 01 04 metallic packaging

Non contaminated packagings may be recycled.

SECTION 14: Transport information

14.1 UN-Number: ADR, IMDG, IATA UN1950

14.2 UN proper shipping name: ADR 1950 AEROSOLS / IMDG AEROSOLS IATA / AEROSOLS, flammable

14.3 Transport hazard class(es)

ADR
Class 2 5F Gases.
Label 2.1

IMDG, IATA
Class 2.1
Label 2.1



14.4 Packing group

ADR, IMDG, IATA: Not regulated

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user

Warning: Gases.

Danger code (Kemler): -

EMS Number: F-D,S-U

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre:

Category A. For AEROSOLS with a capacity above 1 litre:

Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

Segregation Code:

SG69 For AEROSOLS with a maximum capacity of 1 litre:

Segregation as for class 9. Stow "separated from" class 1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2.

For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable.

Transport/Additional information:

Limited quantities (LQ) 1L Code: E0 Not permitted as Excepted Quantity

Excepted quantities (EQ) Code: E0 Not permitted as Excepted Quantity

Transport category: 2

Tunnel restriction code: D

IMDG:

Limited quantities (LQ) 1L Code: E0 Not permitted as Excepted Quantity

Excepted quantities (EQ) Code: E0 Not permitted as Excepted Quantity

UN "Model Regulation": UN 1950 AEROSOLS, 2.1

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances: None of the ingredients is listed.

Seveso category: P3a FLAMMABLE AEROSOLS

Qualifying quantity (tonnes) for the application of lower-tier requirements 150 t

Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t

REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

National regulations: -

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57: None of the ingredients is listed.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases:

H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1: Flammable gases – Category 1
Aerosol 1: Aerosols – Category 1
Press. Gas C: Gases under pressure – Compressed gas
Flam. Liq. 2: Flammable liquids – Category 2
Flam. Liq. 3: Flammable liquids – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3