

Conforms to regulation (EC) 1907/2006 (REACH), annex II as amended by Regulation (EU) 453/2010

SAFETY DATA SHEET

APERTURE SOLVENT

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name **Aperture Solvent**

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

Industrial uses: Solvent blend for cleaning and thinning

Professional uses: Solvent blend for cleaning and thinning

Uses advised against: Product is not for consumer use

1.3 Details of the supplier of the safety data sheet

Aperture Limited
Richmond Road
Trafford Park
Manchester
M17 1RE
Tel: +44 (0) **161 7721750**
Fax: +44 (0) **161 7721751**
Email: cpeers@aperturesp.co.uk

1.4 Emergency Telephone number

+44 (0) 161 7721750 (office hours)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 3, H226

Acute Tox. 4, H312

Acute Tox. 4, H332

Skin Irrit. 2, H315

See Section 16 for the full text of the H statements declared above.

2.2 Label elements

Hazard pictograms:



Signal word: Warning

Hazard Statements

Flammable liquid and vapour.

Harmful in contact with skin or if inhaled.

Causes skin irritation

Precautionary Statements

Prevention:

Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area

Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Call a doctor if you feel unwell.

Supplement Statements

Not applicable

Storage:

Store in a well-ventilated place. Keep cool.

Disposal:

Dispose of contents and container in accordance with all local, regional, national and international regulations.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredient Name	Concentration %	Regulation (EC) No. 1272/2008 [CLP]
xylene (mixture of isomers) REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	50 - 75	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315
2-methoxy-1-methylethyl Acetate REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6 Index: 607-195-00-7	35-50	Flam. Liq. 3, H226

Refer to Section 16 for additional wording

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 or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.

Eye Contact

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation

Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel

Skin Contact

Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners

Ingestion

If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.

Protection of First Aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most Important symptoms and effects, both acute and delayed

There are no data available on the mixture itself.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

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. FIRE FIGHTING MEASURES

5.1 Extinguishing media Suitable extinguishing agents

Recommended: alcohol-resistant foam, CO₂, powders, water spray.

For safety reasons unsuitable extinguishing agents

Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Protective equipment:

Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Appropriate breathing apparatus may be required.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions protective equipment and emergency procedures

Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist.

Refer to protective measures listed in sections 7 and 8. If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

6.2 Environmental precautions:

Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations

6.3 Methods and material for containment and cleaning up:

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 (see Section 13). Preferably clean with a detergent.

Avoid using solvents

6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Protective Measures & Advice on General Occupational hygiene

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of vapour, spray or mist arising from the use of this mixture

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage , including incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, and strong acids.

Additional information on storage conditions

Observe label precautions.

Store in a dry, cool, and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorised access.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage

7.3 Specific end use(s)

Not Available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Product/ingredient name	Exposure limit values
xylene (mixture of isomers)	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 548 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 274 mg/m ³ 8 hours. TWA: 50 ppm 8 hours.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to 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

Product/ingredient name	Type	Exposure	Value	Population	Effects
2-methoxy-1-methylethyl acetate	DNEL	Long Term Inhalation	275 mg/m ³ 50 ppm	Workers	Systemic
	DNEL	Long Term Dermal	153.5 mg/m ³	Workers	Systemic
	DNEL	Long Term Dermal	54.8 mg mg/m ³	Consumers	Systemic
	DNEL	Long Term Oral	1.67 mg/m ³	Consumers	Systemic
xylene (mixture of isomers)	DNEL	Long Term Inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Short Term Inhalation	289 mg/m ³	Workers	Systemic
	DNEL	Short Term Inhalation	289 mg/m ³	Workers	Local
	DNEL	Long Term Dermal	180 mg/kg bw/day	Workers	Systemic
	DNEL	Long Term Inhalation	14.8 mg/m ³	Consumers	Systemic
	DNEL	Short Term Inhalation	174 mg/m ³	Consumers	Systemic
	DNEL	Short Term Inhalation	174 mg/m ³	Consumers	Local
	DNEL	Long Term Dermal	108 mg/kg bw/day	Consumers	Systemic
	DNEL	Long Term Oral	1.6 mg/kg bw/day	Consumers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method detail
2-methoxy-1-methylethyl acetate	Fresh Water	0.635 mg/l	-
	Fresh Water Sediment	3.29 mg/kg	-
	Marine Water Sediment	0.329 mg/kg	-
	Soil	0.29 mg/kg	-
	Sewerage Treatment Plant	100 mg/l	-
xylene (mixture of isomers)	Fresh Water	0.327 mg/l	Assessment factors
	Marine Water	0.327 mg/l	Assessment factors
	Intermittent Releases	0.327 mg/l	Assessment factors
	Sewerage Treatment Plant	6.58 mg/l	Assessment factors
	Fresh Water Sediment	12.46 mg/kg dwt	Assessment factors

	Marine Water Sediment	12.46 mg/kg dwt	Assessment factors
	Soil	2.31 mg/kg dwt	Assessment factors

8.2 Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Personal protective equipment

General protective and hygienic 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

Breathing equipment:

If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: organic vapour (Type A) and particulate filter (EN 140)

Protection of hands:

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

Material of gloves

For prolonged or repeated handling, use the following type of gloves:

Recommended : > 8 hours (breakthrough time): polyvinyl alcohol (PVA) - Viton®

The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374-3 : 2003

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

Eye protection:

Safety glasses with side shields. (EN166)

Body Protection

Personnel should wear antistatic clothing made of natural fibres or of high temperature-resistant synthetic fibres. (EN 1149-1)

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information:

Appearance:

Form:	Liquid
Colour:	Clear
Odour:	Hydrocarbon
Odour threshold:	Not Available
pH-value:	Not Applicable

Change in condition

Melting point/Melting range: Not Available

Initial Boiling point/Boiling range: >35°C

Flash point: 23°C

Evaporation Rate: Not Available

Flammability (solid, gaseous) Not Available

Critical values for explosion:

Lower: 1.1 %

Upper: 6.1 %

Vapour pressure at 20°C: Not Available

Vapour density: >1 (Air = 1)

Relative Density: 0.9g/cm³ (20°C)

Solubility in / Miscibility with Water: Insoluble in water

Partition coefficient (n-octanol/water): Not Available

Auto Ignition temperature: Not Available

Decomposition Temperature: Not Available

Viscosity: Kinematic (40°C): <0.205 cm²/s

Explosive Properties: Not Available

Oxidising Properties: Not Available

9.2 Other information 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

Conditions to be avoided:

Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur

10.4 Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products

10.5 Incompatible materials:

Keep away from the following materials to prevent strong exothermic reactions:
oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO₂ and smoke can be generated.

11. TOXICOLOGICAL DATA

11.1 Information on toxicological effects

There are no data available on the mixture itself.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Acute Toxicity

Product/ingredient Name	Result	Species	Dose	Exposure
xylene (mixture of isomers)	LC50 Inhalation Gas	Rat	5000 ppm	4 hours
	LC50 Inhalation Gas	Rat	6670 ppm	4 hours
	LD50 Oral	Rat	4300 mg/Kg	-
	TDL _o Dermal	Rabbit	4300 mg/Kg	-
2-methoxy-1-methylethyl acetate	LC50 Inhalation Vapour	Rat	4345 mg/l	6 hours
	LD50 Dermal	Rabbit	<5g/Kg	
	LD50 Oral	Rat	8532 mg/Kg	

Conclusion/Summary: Harmful in contact with skin. Harmful if inhaled

Acute toxicity estimates: Not available

Irritation/Corrosion

Product/ingredient Name	Result	Species	Score	Exposure	Observation
xylene (mixture of isomers)	Eyes - Mild Irritant	Rabbit	-	87 mg	
	Eyes - Severe Irritant	Rabbit	-	24 hours 5 mg	
	Skin - Mild Irritant	Rat	-	8 hours 60 µg	
	Skin - Moderate Irritant	Rabbit	-	24 hours 50 mg	
	Skin - Moderate Irritant	Rabbit	-	100 %	

Conclusion/Summary

Skin: Causes skin irritation.

Eyes: Causes serious eye irritation.

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

Sensitisation

Conclusion/Summary

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

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

Mutagenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

Not available

Specific target organ toxicity (repeated exposure)

Not available

Aspiration Hazard

Not available

12. ECOLOGICAL DATA

12.1 Toxicity

There is no data available on the mixture itself

Do not allow to enter drains or watercourses

Product/ingredient Name	Result	Species	Exposure
2-methoxy-1-methylethyl acetate)	Acute EC50 408 to 500 mg/l	Daphnia spec	48 hours
	Acute LC50 161 mg/l	Fish	96 hours
	Acute LC50 100 to 180 mg/l	Fish	96 hours

Conclusion/Summary: Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Product/ingredient Name	Test	Result	Dose	Inoculum
xylene (mixture of isomers)	OECD	90% - Readily - 5 Days	-	

Conclusion/Summary: This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

Product/ingredient Name	Aquatic half-life	Photolysis	Biodegradability
xylene (mixture of isomers)	-	-	Readily
2-methoxy-1-methylethyl acetate	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient Name	LogP _{ow}	BCF	Potential
xylene (mixture of isomers)	3.16	-	Low
2-methoxy-1-methylethyl acetate	0.43	-	Low

12.4 Mobility in soil Not Available

12.5 Results of PBT and VPvB assessment Not Applicable

12.6 Other adverse effects; No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation

The generation of waste should be avoided or minimised 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:

Yes

Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information, contact your local waste authority.

European Waste catalogue (EWC)

14 06 03* Other Solvents and Solvent mixture

14. TRANSPORT INFORMATION

	ADR/RID	IMDG	IATA
14.1 UN Number	UN 1263	UN 1263	UN 1263
14.2 Proper Shipping Name	Paint Related Product	Paint Related Product	Paint Related Product
14.3 Transport Class(es)	3 Flammable liquids. 	3 Flammable liquids. 	3 Flammable liquids. 
14.4 Packing Group	III	III	III
14.5 Environmental Hazards	-	-	-

14.6 Tunnel restriction Code	D/E	D/E	D/E
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Marine pollutant: No

Special Precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

15 REGULATORY INFORMATION

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

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

CN Code: 3814 00 90

EU regulation (EC) 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

VOC for Ready-for-use mixture

Not Applicable

Europe inventory:

All components are listed or exempted.

National regulations

15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

16 OTHER INFORMATION

Indicates information that has changed from previously issued version.

Xylene DNEL's and PNEC's included

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) 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 3, H226	Expert judgment
Acute Tox. 4, H312	Expert judgment
Acute Tox. 4, H332	Expert judgment
Skin Irrit. 2, H315	Expert judgment

Full text of abbreviated H Statements Full text of classifications [CLP/GHS]

H226 Flammable liquid and vapour.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H332 Harmful if inhaled.

Note

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality.

The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications.

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.

Date of Issue; August 3rd 2015

Version; 2

Replaces version 1 (issued 01/04/15)