SAFETY DATA SHEET



ARBO® UPVC SOLVENT CLEANER

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

1.1 Product identifier

Product name : ARBO® UPVC SOLVENT CLEANER
Product description : Cleaner for UPVC windows and doors

Other means of identification

: Not available.

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

Identified uses	
Cleaner for UPVC windows and doors	
Uses advised against	Reason
For professional users only.	-

1.3 Details of the supplier of the safety data sheet

Adshead Ratcliffe & Co. Ltd.

Derby Road, Belper

Derbyshire. DE56 1WJ

+44 (0)1773 826661

e-mail address of person responsible for this SDS

: SDSQueries@carlisleccm.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number : National Poisons Information Service (NPIS)

Tel: 0344 892 0111 (for healthcare professionals only)

Website: http://www.npis.org/

Members of Public in England, Scotland and Wales can contact NHS 111/NHS 24 by

dialling 111. In Northern Ireland contact your local GP.

Supplier

Telephone number : +44 (0)1773 826661 (Office hours: 8.30 - 17.00)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Chronic 2, H411

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms









Signal word : Danger

Hazard statements : H225 - Highly flammable liquid and vapour.

H304 - May be fatal if swallowed and enters airways.

H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness.

H373 - May cause damage to organs through prolonged or repeated exposure.

H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P273 - Avoid release to the environment.

P260 - Do not breathe vapour.

P280 - Wear protective gloves, protective clothing and eye or face protection.

Response : P337 + P313 - If eye irritation persists: Get medical advice/attention.

P301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER or

doctor. Do NOT induce vomiting.

Storage: Not applicable.Disposal: Not applicable.

Supplemental label

elements

articles

: Repeated exposure may cause skin dryness or cracking.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant

fastenings

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII : This mixture does not contain any substances that are assessed to be a PBT or a

vPvB.

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Туре
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	REACH #: 01-2119473851-33 EC: 920-750-0	≥40 - <80	Flam. Liq. 2, H225 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1	≥10 - ≤25	Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]

SECTION 3: Composition/information on ingredients

•				
ethanol	CAS: 123-86-4 Index: 607-025-00-1 REACH #: 01-2119457610-43 EC: 200-578-6 CAS: 64-17-5	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319	[1] [2]
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Index: 603-002-00-5 REACH #: 01-2119458049-33	<10	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1] [2]
2-butoxyethanol ethyl acetate	REACH #: 01-2119475108-36 EC: 203-905-0 CAS: 111-76-2 Index: 603-014-00-0 REACH #:	<10	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2] [1] [2]
ennyi acetate	01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5		Eye Irrit. 2, H319 STOT SE 3, H336 EUH066	[1][2]
			the full text of the H statements declared above.	

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, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SECTION 4: First aid measures

Ingestion

: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact : No specific data.

Ingestion: Adverse symptoms may include the following:

nausea or vomiting

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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing

: Do not use water jet.

media

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

SECTION 7: Handling and storage

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne
E2	200 tonne	500 tonne

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
n-butyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	STEL: 966 mg/m³ 15 minutes.
	STEL: 200 ppm 15 minutes.
	TWA: 724 mg/m³ 8 hours.
	TWA: 150 ppm 8 hours.
ethanol	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	TWA: 1000 ppm 8 hours.
	TWA: 1920 mg/m³ 8 hours.
Hydrocarbons, C9-C12, n-alkanes, isoalkanes,	EH40/2005 WELs (United Kingdom (UK), 1/2020). [TWA]
cyclics, aromatics (2-25%)	TWA: 350 mg/m ³ 8 hours.
2-butoxyethanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 50 ppm 15 minutes.
	TWA: 25 ppm 8 hours.
	STEL: 246 mg/m³ 15 minutes.
	TWA: 123 mg/m³ 8 hours.
ethyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	STEL: 400 ppm 15 minutes.
	TWA: 200 ppm 8 hours.
	STEL: 1468 mg/m³ 15 minutes.
	TWA: 734 mg/m³ 8 hours.

Biological exposure indices

Product/ingredient name	Exposure indices
,	EH40/2005 BMGVs (United Kingdom (UK), 8/2018) BGV: 240 mmol/mol creatinine, butoxyacetic acid [in urine]. Sampling time: post shift.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. 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
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	DNEL	Long term Dermal	773 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	2035 mg/ m ³	Workers	Systemic
	DNEL	Long term Dermal	699 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	608 mg/m ³	General population	Systemic
	DNEL	Long term Oral	699 mg/kg bw/day	General population	Systemic
n-butyl acetate	DNEL	Short term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	7 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	11 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	35.7 mg/m³	General population	Local
	DNEL	Long term Inhalation	48 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	300 mg/m ³	General population	Local
	DNEL	Short term Inhalation	300 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	300 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	600 mg/m ³	Workers	Systemic
ethanol	DNEL	Long term Oral	87 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	114 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	206 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	343 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	950 mg/m ³	General population	Local
	DNEL	Long term Inhalation	950 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	1900 mg/ m³	Workers	Local
Hydrocarbons, C9-C12, n-alkanes, soalkanes, cyclics, aromatics (2-25%)	DNEL	Long term Inhalation	0.192 mg/ m³	Workers	Systemic
(= 	DNEL	Long term Dermal	0.54 mg/ kg bw/day	Workers	Systemic

SECTION 8: Exposure controls/personal protection

		1.			12
	DNEL	Long term	0.034 mg/	General	Systemic
		Inhalation	m³	population	
	DNEL	Long term Dermal	0.19 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term Oral	0.02 mg/	General	Systemic
		-	kg bw/day	population	
2-butoxyethanol	DNEL	Long term Oral	6.3 mg/kg	General	Systemic
			bw/day	population	
	DNEL	Short term Oral	26.7 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term	59 mg/m³	General	Systemic
	-	Inhalation		population	,
	DNEL	Long term	98 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Short term	147 mg/m³	General	Local
	J. 1LL	Inhalation		population	23041
	DNEL	Short term	246 mg/m³	Workers	Local
	DIVLL	Inhalation	270 mg/m	VVOINCIS	Local
	DNEL	Short term	426 mg/m³	General	Systemic
	DIVEL	Inhalation	420 mg/m²		Systerric
	DNEI		1001 mg/	population Workers	Systemia
	DNEL	Short term	1091 mg/ m³	vvoikeis	Systemic
othyd gootata	חאבי	Inhalation		Conoral	Cuatamia
ethyl acetate	DNEL	Long term Oral	4.5 mg/kg	General	Systemic
	חובי		bw/day	population	0
	DNEL	Long term Dermal	37 mg/kg	General	Systemic
	DNIE:		bw/day	population	
	DNEL	Long term Dermal	63 mg/kg	Workers	Systemic
	DNIE:		bw/day		
	DNEL	Long term	367 mg/m ³	General	Local
	DNE:	Inhalation	007 / 0	population	
	DNEL	Long term	367 mg/m ³	General	Systemic
		Inhalation		population	l
	DNEL	Short term	734 mg/m ³	General	Local
		Inhalation		population	
	DNEL	Short term	734 mg/m ³	General	Systemic
		Inhalation		population	
	DNEL	Long term	734 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term	734 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term	1468 mg/	Workers	Local
		Inhalation	m³		
	DNEL	Short term	1468 mg/	Workers	Systemic
		Inhalation	m³		,

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
n-butyl acetate	Fresh water	0.18 mg/l	-
•	Fresh water	0.36 mg/l	-
	Marine water	0.018 mg/l	-
	Sewage Treatment Plant	35.6 mg/l	-
	Fresh water sediment	0.981 mg/kg	-
	Marine water sediment	0.098 mg/kg	-
	Soil	0.09 mg/kg	-
ethanol	Fresh water	0.96 mg/l	-
	Fresh water	2.75 mg/l	-
	Marine water	0.79 mg/l	-
	Sewage Treatment Plant	580 mg/l	-
	Fresh water sediment	3.6 mg/kg dwt	-
	Marine water sediment Soil	2.9 ng/kg dwt 0.63 mg/kg dwt	-

SECTION 8: Exposure controls/personal protection

	Secondary Poisoning	380 mg/kg	-
Hydrocarbons, C9-C12, n-alkanes,	Fresh water	0.126 µg/l	-
isoalkanes, cyclics, aromatics (2-25%)			
	Fresh water	1.3 µg/l	-
	Marine water	0.013 µg/l	-
	Sewage Treatment	1 mg/l	-
	Plant		
	Fresh water sediment	1.481 µg/kg dwt	-
	Marine water sediment	148.1 µg/kg dwt	-
	Soil	295.3 µg/kg dwt	-
	Secondary Poisoning	1 mg/kg	-
2-butoxyethanol	Fresh water	8.8 mg/l	-
	Fresh water	26.4 mg/l	-
	Marine water	0.88 mg/l	-
	Sewage Treatment	463 mg/l	-
	Plant		
	Fresh water sediment	34.6 mg/kg dwt	-
	Marine water sediment	3.46 mg/kg dwt	-
	Soil	2.33 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-
ethyl acetate	Fresh water	0.24 mg/l	-
	Fresh water	1.65 mg/l	-
	Marine water	0.024 mg/l	-
	Sewage Treatment	650 mg/l	-
	Plant		
	Fresh water sediment	1.15 mg/kg	-
	Marine water sediment	0.115 mg/kg	-
	Soil	0.148 mg/kg	-
	Secondary Poisoning	200 mg/kg	-

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene 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.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

SECTION 8: Exposure controls/personal protection

Other skin protection : Appropriate footwear and any additional skin protection measures should be

selected based on the task being performed and the risks involved and should be

approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use.

Environmental exposure

controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment

will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid.

Colour : Colourless.

Odour : Solvent.

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and boiling

range

: 78.4 to 115.4°C (173.1 to 239.7°F)

Flammability (solid, gas) : Not available.

Upper/lower flammability or explosive limits : Lower: 3.3%

Upper: 19%

Flash point : Open cup: 12°C (53.6°F)

Auto-ignition temperature : 230°C (446°F)

Decomposition temperature : Not available.

PH : Not available.

Viscosity : No results available.

Solubility(ies) :

Media	Result
acetone	Soluble
cold water	Very slightly soluble

Solubility in water : Very slightly soluble Partition coefficient: n-octanol/ : Not applicable.

attition coefficient. II-c

water

Not applicable.

Vapour pressure : 5.8 kPa (43.504 mm Hg) **Relative density** : 0.744

Vapour density : Not available.

Explosive properties : Not available.

Oxidising properties : Not available.

Particle characteristics

Median particle size : Not applicable.

SECTION 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

: The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

: Reactive or incompatible with the following materials: oxidising materials

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
n-butyl acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
•	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	10768 mg/kg	-
ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m ³	4 hours
	LD50 Oral	Rat	7 g/kg	-
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	LC50 Inhalation Vapour	Rat	>13.1 mg/l	4 hours
	LD50 Dermal	Rat	>3400 mg/kg	-
	LD50 Oral	Rat	>15000 mg/kg	-
2-butoxyethanol	LC50 Inhalation Gas.	Rat	450 ppm	4 hours
ethyl acetate	LD50 Oral	Rat	5620 mg/kg	-

Conclusion/Summary

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

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
ARBO® UPVC SOLVENT CLEANER	18096.1	N/A	N/A	45.2	N/A
n-butyl acetate	10768	N/A	N/A	N/A	N/A
ethanol	7000	N/A	N/A	124.7	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
ethyl acetate	5620	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
n-butyl acetate	Eyes - Moderate irritant	Rabbit	-	100 mg	-
,	Eyes - Not irritant	Rabbit	-	-	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Not irritant	Rabbit	-	-	-
ethanol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Eyes - Moderate irritant	Rabbit	-	0.066666667	-
				minutes 100	
				mg	
				-	

SECTION 11: Toxicological information

	Eyes - Moderate irritant	Rabbit	-	100 uL	-
	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	400 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	mg 24 hours 100	-
				mg	
	Eyes - Severe irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-

Conclusion/Summary

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

irritation.

Eyes : Eye Irrit. 2

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)

Product/ingredient name	Category	Route of exposure	Target organs
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics n-butyl acetate Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) ethyl acetate	Category 3 Category 3 Category 3	-	Narcotic effects Narcotic effects Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	Category 1		central nervous system (CNS)

Aspiration hazard

Product/ingredient name	Result
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on likely routes

of exposure

: Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or

dizziness.

Skin contact: No known significant effects or critical hazards.

SECTION 11: Toxicological information

Ingestion

: Can cause central nervous system (CNS) depression. May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:

nausea or vomiting

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate

effects

: Causes serious eye irritation.

drowsiness/fatigue dizziness/vertigo

Potential delayed effects : Not available.

Long term exposure

Potential immediate

effects

: Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary: Not available.

General: May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics	EC50 10 to 30 mg/l	Algae - Pseudokirchneriella subcapitata	72 hours
	EC50 3 mg/l	Daphnia - Daphnia	48 hours
	LC50 >13.4 mg/l	Fish - Trout	96 hours
n-butyl acetate	Acute EC50 397 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 44 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 32 mg/l Marine water	Crustaceans - Brine shrimp - Artemia salina	48 hours
	Acute LC50 18000 μg/l Fresh water	Fish - Fathead minnow - Pimephales promelas	96 hours
	Chronic EC10 196 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Chronic NOEC 23 mg/l Fresh water	Daphnia - Daphnia magna	21 days

SECTION 12: Ecological information

ethanol	Acute EC50 17.921 mg/l Marine water	Algae - Green algae - <i>Ulva</i>	96 hours
		pertusa	
	Acute EC50 2000 μg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute LC50 25500 μg/l Marine water	Crustaceans - San Francisco Brine Shrimp - <i>Artemia</i> <i>franciscana</i> - Larvae	48 hours
	Acute LC50 42000 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - <i>Oncorhynchus mykiss</i>	4 days
	Chronic NOEC 4.995 mg/l Marine water	Algae - Green algae - <i>Ulva</i> pertusa	96 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.375 ul/L Fresh water	Fish - Eastern mosquitofish - Gambusia holbrooki - Larvae	12 weeks
2-butoxyethanol	Acute EC50 >1000 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i> magna	48 hours
	Acute LC50 800000 μg/l Marine water	Crustaceans - Common shrimp, sand shrimp - Crangon crangon	48 hours
	Acute LC50 1250 ppm Marine water	Fish - Inland silverside - Menidia beryllina	96 hours
ethyl acetate	Acute EC50 2500000 μg/l Fresh water	Algae - Green algae - Selenastrum sp.	96 hours
	Acute LC50 750000 μg/l Fresh water	Crustaceans - Scud - Gammarus pulex	48 hours
	Acute LC50 154000 μg/l Fresh water	Daphnia - Water flea - Daphnia cucullata	48 hours
	Acute LC50 212500 μg/l Fresh water	Fish - Indian catfish - Heteropneustes fossilis	96 hours
	Chronic NOEC 2.4 mg/l Fresh water	Daphnia - Water flea - Daphnia magna	21 days
	Chronic NOEC 75.6 mg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i> - Embryo	32 days

Conclusion/Summary : Aquatic Chronic 2

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
n-butyl acetate Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aromatics (2-25%)	-	83 % - Readily - 28 days 74.7 % - Readily - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics n-butyl acetate Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics,	- - -	-	Readily Readily Readily
aromatics (2-25%) ethyl acetate	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
n-butyl acetate	2.3	-	Low
ethanol	-0.35	-	Low
2-butoxyethanol	0.81	-	Low
ethyl acetate	0.68	30	Low

SECTION 12: Ecological information

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

: Yes.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

: 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

Waste catalogue

Waste code	Waste designation
14 06 03*	other solvents and solvent mixtures

Packaging

Methods of disposal

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1993	UN1993	UN1993	UN1993
14.2 UN proper shipping name	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, n- butyl acetate)	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, n- butyl acetate)	FLAMMABLE LIQUID, N.O.S. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, n- butyl acetate)	Flammable liquid, n.o. s. (Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, n- butyl acetate)
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	II	II	II	II

SECTION 14: Transport information

14.5	Yes.	Yes.	Yes.	Yes. The
Environmental				environmentally
hazards				hazardous substance
				mark is not required.

Additional information

ADR/RID

: The environmentally hazardous substance mark is not required when transported in

sizes of ≤5 L or ≤5 kg.

Hazard identification number 33

Limited quantity 1 L

Special provisions 601, 274, 640D

Tunnel code (D/E)

ADN

: The environmentally hazardous substance mark is not required when transported in

sizes of ≤5 L or ≤5 kg.

Special provisions 274, 601, 640D

IMDG

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, _S-E_

Special provisions 274

IATA

The environmentally hazardous substance mark may appear if required by other

transportation regulations.

Quantity limitation Passenger and Cargo Aircraft: 5 L. Packaging instructions: 353.

Cargo Aircraft Only: 60 L. Packaging instructions: 364. Limited Quantities -

Passenger Aircraft: 1 L. Packaging instructions: Y341.

Special provisions A3

14.6 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.

14.7 Transport in bulk according to IMO

instruments

: Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
ARBO® UPVC SOLVENT CLEANER	≥90	3

Labelling : Not applicable.

Seveso Directive

SECTION 15: Regulatory information

This product is controlled under the Seveso Directive.

Danger criteria

Category

P5c E2

EU regulations

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Air

Industrial emissions : Not listed

(integrated pollution prevention and control) -

Water

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.
Canada : Not determined.
China : Not determined.

Eurasian Economic Union: Russian Federation inventory: Not determined.

Japan : Japan inventory (CSCL): Not determined.

Japan inventory (ISHL): Not determined.

New Zealand : Not determined. **Philippines** : Not determined. Republic of Korea : Not determined. **Taiwan** : Not determined. **Thailand** : Not determined. : Not determined. **Turkey United States** : Not determined. **Viet Nam** : Not determined.

15.2 Chemical safety : No Chemical Safety Assessnent has been carried out for the mixture.

assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

SECTION 16: Other information

Abbreviations and acronyms : ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

No. 720 and amendments

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification	
Flam. Liq. 2, H225	On basis of test data	
Eye Irrit. 2, H319	Calculation method	
STOT SE 3, H336	Calculation method	
STOT RE 2, H373	Calculation method	
Asp. Tox. 1, H304	Calculation method	
Aquatic Chronic 2, H411	Calculation method	

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications

Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of printing Date of issue/ Date of

revision

: 8 August 2023 : 8 August 2023

Date of previous issue : No previous validation

Version

Notice to reader

SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.