

SAFETY DATA SHEET ARBO CLEANER No. 15

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

PRODUCT NAME	ARBO CLEANER No. 15
APPLICATION	Cleaning agent Solvent
SUPPLIER	Adshead Ratcliffe & Co. Ltd. Derby Road, Belper Derbyshire. DE56 1WJ Tel. (+44) 01773 826661 Fax. (+44) 01773 821215 sds@arbo.co.uk
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2 HAZARDS IDENTIFICATION

Highly flammable. Irritating to eyes. Repeated exposure may cause skin dryness or cracking. Vapours may cause drowsiness and dizziness.

CLASSIFICATION Xi;R36. F;R11. R66, R67.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
BUTANONE	201-159-0	78-93-3	60-100%	F;R11 Xi;R36 R66 R67

The Full Text for all R-Phrases are Displayed in Section 16

4 FIRST-AID MEASURES

GENERAL INFORMATION

In all cases of doubt, or if symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

INHALATION

Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

INGESTION

NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Drink plenty of water. DO NOT induce vomiting. Get medical attention immediately.

SKIN CONTACT

Remove affected person from source of contamination. Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention if any discomfort continues.

EYE CONTACT

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Alcohol resistant foam. Carbon dioxide (CO₂). Dry chemicals, sand, dolomite etc.

SPECIAL FIRE FIGHTING PROCEDURES

Keep run-off water out of sewers and water sources. Dike for water control. Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Use water spray to reduce vapours. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. If risk of water pollution occurs, notify appropriate authorities.

UNUSUAL FIRE & EXPLOSION HAZARDS

May explode in a fire. May develop highly toxic or corrosive fumes if heated. May travel considerable distance to source of ignition and flash back. Vapour explosion and poison hazard indoors, outdoors and in sewers.

6 ACCIDENTAL RELEASE MEASURES

ARBO CLEANER No. 15

PERSONAL PRECAUTIONS

Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses.

SPILL CLEAN UP METHODS

Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted. Absorb small quantities with paper towels and evaporate in safe place (fume hood). Allow sufficient time for vapours to completely clear the hood ducts, then burn the paper in a location away from combustible materials. Let evaporate. Keep out of confined spaces because of explosion risk. Clean-up personnel should use respiratory and/or liquid contact protection.

7 HANDLING AND STORAGE

USAGE PRECAUTIONS

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Avoid acids, moisture, and combustible materials. Read and follow manufacturer's recommendations.

STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames. Store in tightly closed original container in a dry, cool and well-ventilated place. Protect from light, including direct sunrays. Ground container and transfer equipment to eliminate static electric sparks.

STORAGE CLASS

Flammable liquid storage.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
BUTANONE	WEL	200 ppm(Sk)	600 mg/m3(Sk)	300 ppm(Sk)	899 mg/m3(Sk)

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT



ENGINEERING MEASURES

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit is not exceeded.

RESPIRATORY EQUIPMENT

Respiratory protection must be used if air contamination exceeds acceptable level. Chemical respirator with organic vapour cartridge and full facepiece.

HAND PROTECTION

Use protective gloves made of: Butyl rubber. P.T.F.E (Teflon).

EYE PROTECTION

Wear approved safety goggles.

OTHER PROTECTION

Provide eyewash station. Wear appropriate clothing to prevent repeated or prolonged skin contact.

HYGIENE MEASURES

Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove non-impervious clothing that becomes contaminated. Contaminated clothing to be placed in closed container until disposal or decontamination. Warn cleaning personnel of chemical's hazardous properties.

9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Liquid

COLOUR

Colourless

ODOUR

Pleasant, agreeable.

Acetone, ketone.

SOLUBILITY

Soluble in water

BOILING POINT (°C)

~ 79

MELTING POINT (°C)

~ -86

ARBO CLEANER No. 15

RELATIVE DENSITY	0.81 @ 20°C	VAPOUR DENSITY (air=1)	2.42
VAPOUR PRESSURE	78 mmHg @ 20°C	EVAPORATION RATE	6.00
ODOUR THRESHOLD, LOWER	25.00 ppm	FLASH POINT (°C)	~ -5 (Tag closed cup)
AUTO IGNITION	515	FLAMMABILITY LIMIT - LOWER(%)	1.80
TEMPERATURE (°C)			
FLAMMABILITY LIMIT - UPPER(%)	11.50	SOLUBILITY VALUE (g/100g H ₂ O@20°C)	27.00

10 STABILITY AND REACTIVITY**STABILITY**

Stable under normal temperature conditions and recommended use.

CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Avoid contact with water.

11 TOXICOLOGICAL INFORMATION

TOXIC DOSE 1 - LD 50 3400 mg/kg (oral rat)

GENERAL INFORMATION

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

INHALATION

Irritating to respiratory system.

INGESTION

May cause stomach pain or vomiting.

SKIN CONTACT

Irritating to skin.

EYE CONTACT

Irritating to eyes.

ROUTE OF ENTRY

Inhalation. Ingestion. Skin and/or eye contact.

TARGET ORGANS

Central nervous system. Eyes. Gastro-intestinal tract. Respiratory system, lungs. Skin.

MEDICAL SYMPTOMS

Extreme irritation of eyes and mucous membranes, including burning and tearing. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes). Upper respiratory irritation. General respiratory distress, unproductive cough. May cause suffocation. Severe skin irritation. Nausea, vomiting. Unconsciousness, possibly death. Central nervous system depression. Drowsiness, dizziness, disorientation, vertigo. Behavioural changes. Hypotension (low blood pressure). Dizziness.

MEDICAL CONSIDERATIONS

Skin disorders and allergies. Convulsive disorders, CNS problems.

12 ECOLOGICAL INFORMATION**ECOTOXICITY**

This substance is relatively volatile. It will evaporate from water and soil over the course of a few days.

LC 50, 96 Hrs, FISH mg/l 3200 - 5600

EC 50, 48 Hrs, DAPHNIA, mg/l 7060

MOBILITY

The product is soluble in water.

BIOACCUMULATION

This product is not expected to significantly bioaccumulate. Log Pow = 0.29

DEGRADABILITY

Can be expected to biodegrade rapidly. Biodegradable according to OECD guidelines. BOD5 = 62% ThOD

13 DISPOSAL CONSIDERATIONS**DISPOSAL METHODS**

Incinerate in suitable combustion chamber.

Absorb in vermiculite or dry sand, dispose in licensed hazardous waste.

ARBO CLEANER No. 15

Collect on absorbent material, place in cardboard kegs and incinerate.

Confirm disposal procedures with environmental engineer and local regulations.

WASTE CLASS

H3A(i) - Highly flammable

H4 - Irritant

Recommended EWC Code 14 06 03*

14 TRANSPORT INFORMATION



PROPER SHIPPING NAME	ETHYL METHYL KETONE		
UN NO. ROAD	1193	ADR CLASS NO.	3
ADR CLASS	Class 3: Flammable liquids.	HAZARD NO. (ADR)	33 Highly flammable liquid (flash-point below 23°C).
ADR LABEL NO.	3	HAZCHEM CODE	2YE
RID CLASS NO.	3	UN NO. SEA	1193
IMDG CLASS	3	IMDG PACK GR.	II
EMS	3-06	MARINE POLLUTANT	No.
UN NO. AIR	1193	AIR CLASS	3
AIR PACK GR.	II		

15 REGULATORY INFORMATION

LABELLING



Irritant



Highly Flammable

RISK PHRASES

R11	Highly flammable.
R36	Irritating to eyes.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.

SAFETY PHRASES

S16	Keep away from sources of ignition - No smoking.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37	Wear suitable gloves.
S51	Use only in well-ventilated areas.
S60	This material and its container must be disposed of as hazardous waste.

EU DIRECTIVES

Dangerous Preparations Directive 1999/45/EC.

STATUTORY INSTRUMENTS

Control of Substances Hazardous to Health. Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

16 OTHER INFORMATION

REVISION COMMENTS

Revised sections: 2, 3, 13,

REVISION DATE 09/07/08

REV. NO./REPL. SDS GENERATED 11/08/05

SDS NO. 10028

SAFETY DATA SHEET STATUS

Approved.

RISK PHRASES IN FULL

R11 Highly flammable.

R36 Irritating to eyes.

R66 Repeated exposure may cause skin dryness or cracking.

R67 Vapours may cause drowsiness and dizziness.

DISCLAIMER

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.