

Safety Data Sheet



1. Identification of the substance/preparation and company

Product Name: Circuit Board Cleaner
Product Number: CBC400
Application: Electrical cleaner
Supplier: SWA Ltd
Abbey Mills
Charfield Road
Wotton-Under-Edge
Glos GL12 8RL
+44 (0) 1453 844 333 (Tel)
+44 (0) 1453 842 224 (Fax)

2. Composition

Name	EC No.	CAS-No.	Content	Classification
BUTANE	203-448-7	106-97-8	5-10%	F+; R12
ISOBUTANE	200-857-2	75-28-5	1-5%	F+; R12
PROPAN-2-OL	200-661-7	67-63-0	60-100%	F; R11 Xi; R36 R67

The full text for all R-Phrases are displayed in section 16.

3. Hazards Identification

Vapours may cause drowsiness and dizziness. Extremely flammable. Irritating to eyes.

CLASSIFICATION Xi;R36. F+;R12. R67.

ENVIRONMENT

This product does not contain substances which are harmful to aquatic organisms or which may cause long term effects to the aquatic environment.

PHYSICAL AND CHEMICAL HAZARDS

Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

HUMAN HEALTH

Gas or vapour is harmful on prolonged exposure or in high concentration. In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

4. First Aid Measures

GENERAL INFORMATION

Move the exposed person to fresh air at once.

INHALATION

In case of inhalation of spray mist: Move person to fresh air and keep at rest. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

INGESTION

Immediately rinse mouth and provide fresh air. Do not induce vomiting. Get medical attention.

SKIN CONTACT

Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above.

EYE CONTACT

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyes wide apart. Continue to rinse for at least 15 minutes and get medical attention.

5. Fire-Fighting Measures

EXTINGUISHING MEDIA

Extinguish with foam, carbon dioxide, dry powder or water fog.

SPECIAL FIRE FIGHTING PROCEDURES

Water spray should be used to cool containers. Use water to keep fire exposed containers cool and disperse vapours. Warn fire-fighters that aerosols are involved.

UNUSUAL FIRE & EXPLOSION HAZARDS

Extremely flammable. Forms explosive mixtures with air. May travel considerable distance to source of ignition and flash back. Aerosol cans may explode in a fire.

SPECIFIC HAZARDS

Aerosol containers can explode when heated, due to excessive pressure build-up.

6. Accidental Release Measures

PERSONAL PRECAUTIONS

Provide adequate ventilation. In case of inadequate ventilation, use respiratory protection. Avoid inhalation of vapours and aerosol spray.

ENVIRONMENTAL PRECAUTIONS

Do not allow to enter drains, sewers or watercourses. Contain spillages with sand, earth or any suitable adsorbent material.

SPILL CLEAN-UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Absorb spillage with non-combustible, absorbent material. Let evaporate. Keep out of confined spaces because of explosion risk.

7. Handling and Storage

USAGE PRECAUTIONS

Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Eliminate all sources of ignition. Do not spray near a naked flame or any incandescent material.

STORAGE PRECAUTIONS

Extremely flammable. Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well-ventilated area. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

8. Exposure Controls, Personal Protection

Name	Std	LT-ppm	LT-mg/m ³	ST-ppm	ST-mg/m ³
BUTANE	WEL	600 ppm		750 ppm	
PROPAN-2-OL	WEL	400 ppm	999 mg/m ³	500 ppm	1250 mg/m ³
ISOBUTANE	WEL	800 ppm		No std.	

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

ENGINEERING MEASURES

Provide adequate ventilation. Observe Workplace Exposure Limits and minimise the risk of inhalation of spray.

RESPIRATORY EQUIPMENT

In case of inadequate ventilation use suitable respirator.

HAND PROTECTION

Due to the packaging form (aerosol) risk of skin contact is small. For prolonged or repeated skin contact use suitable protective gloves. The most suitable glove must be chosen in consultation with the glove supplier, who can inform about the breakthrough time of the glove material.

EYE PROTECTION

Use eye protection. Wear approved chemical safety goggles where eye exposure is reasonably probable.

HYGIENE MEASURES

Wash hands after handling. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Use appropriate skin cream to prevent drying of skin.

PERSONAL PROTECTION

When using the aerosol do not smoke.

9. Physical and Chemical Properties

APPEARANCE Aerosol

ODOUR Organic solvents

PHYSICAL DATA COMMENTS Information given concerns the major ingredient.

FLASH POINT (°C) <-40 AUTO IGNITION TEMPERATURE (°C) 410-580

FLAMMABILITY LIMIT – LOWER (%) 1.8 FLAMMABILITY LIMIT – UPPER (%) 9.5

10. Stability and Reactivity

STABILITY

Avoid: Heat, sparks, flames.

CONDITIONS TO AVOID

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

HAZARDOUS DECOMPOSITION PRODUCTS

By fire, toxic gases (CO, CO₂, NO_x) may be formed.

11. Toxicological Information

GENERAL INFORMATION

Deliberately concentrating and inhaling the contents of this container is dangerous and can be fatal.

INHALATION

In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Unconsciousness, possibly death.

SKIN CONTACT

Skin irritation is not anticipated when used normally. Repeated exposure may cause skin dryness or cracking.

EYE CONTACT

Irritating to eyes. Spray and vapour in the eyes may cause irritation and smarting. Repeated exposure may cause chronic eye irritation.

HEALTH WARNING

Arrhythmia (deviation from the normal heart beat).

In high concentrations, vapours and aerosol mists may have a narcotic effect and may cause headache, fatigue, dizziness, nausea.

ROUTE OF ENTRY

Inhalation.

TARGET ORGANS

Central nervous system. Respiratory system, lungs.

MEDICAL SYMPTOMS

Arrhythmia (deviation from normal heart beat). Narcotic effect. Vapours may cause drowsiness and dizziness.

12. Ecological Information

ECOTOXICITY

No negative effects on the aquatic environment are known. The product is not expected to be toxic to aquatic organisms.

13. Disposal Considerations

GENERAL INFORMATION

Do not puncture or incinerate even when empty.

DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements. Make sure containers are empty before discarding (explosion risk). Empty containers must not be burned because of explosion hazard.

14. Transport Requirements

GENERAL

This product is packed in accordance with the Limited Quantity Provisions of CDGCPL2, ADR and IMDG. These provisions allow transport of aerosols of less than 1 litre packed in cartons of less than 30kg gross weight to be exempt from control providing that they are labelled in accordance with the requirements of these regulations to show that they are being transported as Limited Quantities.

Aerosols not so packed and labelled must show the following:



UK ROAD CLASS	2		
PROPER SHIPPING NAME	Aerosols		
UN NO. ROAD	1950	UK ROAD PACK GR.	Not applicable
ADR CLASS NO.	2, 5F	ADR CLASS	Class 2.1: Flammable gases
ADR PACK GROUP	Not applicable	HAZARD NO. (ADR)	23 Flammable gas.
ADR LABEL NO.	3	CEFIC TEC(R) NO.	20G53
RID CLASS NO.	2	RID PACK GROUP	Not applicable
UN NO. SEA	1950	IMDG CLASS	2
IMDG PAGE NO.	2102	IMDG PACK GR.	Not applicable
EMS	2-13	UN NO. AIR	1950
AIR CLASS	2.1	AIR PACK GR.	Not applicable

15. Regulatory Information

LABELLING



Irritant



Extremely flammable

RISK PHRASES

R12	Extremely flammable
R36	Irritating to eyes
R67	Vapours may cause drowsiness and dizziness

SAFETY PHRASES

S2	Keep out of the reach of children
S16	Keep away from sources of ignition
S23	Do not breathe vapour/spray
S26	In case of contact with eyes
S51	Use only in well-ventilated areas

UK REGULATORY REFERENCES

The Control of Substances Hazardous to Health Regulations 1988. Chemicals (Hazard Information & Packaging) Regulations.

EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EEC. System of specific information relating to Dangerous Preparations 2001/58/EEC.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health. The Aerosol Dispensers Regulations 1977 & 1999.

APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply. British Aerosol Manufacturers Code of Practice 7th Edition 1999.

GUIDANCE NOTES

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

NATIONAL REGULATIONS

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2002. No. 1689.

16. Other Information

SDS NO.	10965
SAFETY DATA SHEET STATUS	Approved
DATE	25.01.2006
RISK PHRASES IN FULL	
R11	Highly flammable
R12	Extremely flammable
R36	Irritating to eyes
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.