

SAFETY DATA SHEET**Combat****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name Combat

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

Identified uses Disinfectant.

1.3. Details of the supplier of the safety data sheet

Supplier Aztec Chemicals
Unit 16, University Way
Orion Park
Crewe
Cheshire
CW1 6NG
+ 44 (0) 1270 655500 (T)
+ 44 (0) 1270 655501 (F)
info@aztecchemicals.com

1.4. Emergency telephone number

Emergency telephone +44 (0)7831 300868

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification****Physical hazards**

Aerosol 1 - H222, H229

Health hazards

Acute Tox. 4 - H302 Eye Irrit. 2 - H319 Elicitation (Skin Sens.) STOT SE 2 - H371

Environmental hazards

Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC)

F+;R12. R52/53,R67.

Human health

Gas or vapour is harmful on prolonged exposure or in high concentrations. 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.

Environmental

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

Physicochemical

Aerosol containers can explode when heated, due to excessive pressure build-up. The product is extremely flammable. When sprayed on a naked flame or any incandescent material the aerosol vapours can be ignited.

2.2. Label elements**Pictogram**

Signal word



Danger



Combat

Hazard statements

H222 Extremely flammable aerosol.
 H229 Pressurised container: may burst if heated
 H302 Harmful if swallowed.
 H319 Causes serious eye irritation.
 H371 May cause damage to organs .
 H412 Harmful to aquatic life with long lasting effects.
 EUH208 Contains 4-chloro-3-methylphenol. May produce an allergic reaction.

Precautionary statements

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 vapour/spray.
 P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
 P102 Keep out of reach of children.
 P501 Dispose of contents/container in accordance with local regulations.
 P271 Use only outdoors or in a well-ventilated area.

Contains

METHANOL

Supplementary precautionary statements

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

2.3. Other hazards

SECTION 3: Composition/information on ingredients

3.2. Mixtures

ETHANOL	60-100%
CAS number: 64-17-5 EC number: 200-578-6 REACH registration number: 01-2119457610-43	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	F;R11
Eye Irrit. 2 - H319	
PROPAN-2-OL	10-30%
CAS number: 67-63-0 EC number: 200-661-7 REACH registration number: 01-2119457558-25	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Liq. 2 - H225	F;R11 Xi;R36 R67
Eye Irrit. 2 - H319	
STOT SE 3 - H336	
PROPANE	10-30%
CAS number: 74-98-6 EC number: 200-827-9 REACH registration number: Exempt under REACH	
Classification	Classification (67/548/EEC or 1999/45/EC)
Flam. Gas 1 - H220	F+;R12
Press. Gas	

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BUTANE	5-10%
CAS number: 106-97-8 EC number: 203-448-7 REACH registration number: Exempt under REACH	
Classification Flam. Gas 1 - H220 Press. Gas	Classification (67/548/EEC or 1999/45/EC) F+;R12
ISOBUTANE	1-5%
CAS number: 75-28-5 EC number: 200-857-2 REACH registration number: Exempt under REACH	
Classification Flam. Gas 1 - H220 Press. Gas	Classification (67/548/EEC or 1999/45/EC) F+;R12
METHANOL	1-5%
CAS number: 67-56-1 EC number: 200-659-6 REACH registration number: 01-2119433307-44	
Classification Flam. Liq. 2 - H225 Acute Tox. 3 - H301 Acute Tox. 3 - H311 STOT SE 1 - H370	Classification (67/548/EEC or 1999/45/EC) F;R11 T;R23/24/25,R39/23/24/25
2-benzyl-4-chlorophenol	<1%
CAS number: 120-32-1 EC number: 204-385-8 REACH registration number: N/A M factor (Acute) = 1 M factor (Chronic) = 1	
Classification Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410	Classification (67/548/EEC or 1999/45/EC) Xi;R41,R38. N;R50/53.
4-chloro-3-methylphenol	<1%
CAS number: 59-50-7 EC number: 200-431-6 REACH registration number: 01-2119938953-25 M factor (Acute) = 1	
Classification Acute Tox. 4 - H302 Acute Tox. 4 - H312 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Acute 1 - H400	Classification (67/548/EEC or 1999/45/EC) Xn;R21/22 R43 Xi;R41 N;R50

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 at once.

Inhalation

If spray/mist has been inhaled, proceed as follows. Move affected person to fresh air and keep warm and at rest in a position

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comfortable for breathing. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.

Ingestion

Rinse mouth thoroughly with water. Do not induce vomiting. Get medical attention.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water.

Eye contact

Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Specific hazards

Extremely flammable. Forms explosive mixtures with air. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up.

5.3. Advice for firefighters

Protective actions during firefighting

Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Warn firefighters that aerosols are involved.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions

Provide adequate ventilation. Use suitable respiratory protection if ventilation is inadequate. Avoid inhalation of vapours.

6.2. Environmental precautions

Environmental precautions

Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

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 spillage with non-combustible, absorbent material. Leave small quantities to evaporate, if safe to do so. Do not allow material to enter confined spaces, due to the risk of explosion.

6.4. Reference to other sections

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions

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

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions

Extremely flammable. Keep away from heat, sparks and open flame. Store at moderate temperatures in dry, well ventilated

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area. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

7.3. Specific end use(s)

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

ETHANOL

Long-term exposure limit (8-hour TWA): WEL 1000 ppm 1920 mg/m³

PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m³

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m³

PROPANE

Long-term exposure limit (8-hour TWA): SUP ppm

Short-term exposure limit (15-minute): SUP ppm

BUTANE

Long-term exposure limit (8-hour TWA): WEL 600 ppm

Short-term exposure limit (15-minute): WEL 750 ppm

ISOBUTANE

Long-term exposure limit (8-hour TWA): WEL 800 ppm

Short-term exposure limit (15-minute): WEL No std.

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Long-term exposure limit (8-hour TWA): WEL 200 ppm(Sk) 266 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 250 ppm(Sk) 333 mg/m³(Sk)

WEL = Workplace Exposure Limit

Ingredient comments

WEL = Workplace Exposure Limits

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ETHANOL (CAS: 64-17-5)

Ingredient comments

WEL = Workplace Exposure Limits

DNEL Industry - Inhalation; Short term : 1900 mg/m³
 Industry - Dermal; Long term : 343 mg/kg/day
 Industry - Inhalation; Long term : 950 mg/m³
 Consumer - Inhalation; Short term : 950 mg/m³
 Consumer - Dermal; Long term : 206 mg/kg/day
 Consumer - Inhalation; Long term : 114 mg/m³
 Consumer - Oral; Long term : 87 mg/kg/day

PNEC - Fresh water; 0.96 mg/l
 - Marine water; 0.79 mg/l
 - Sediment; 3.6 mg/kg
 - Soil; 0.62 mg/kg
 - STP; 580 mg/l

PROPAN-2-OL (CAS: 67-63-0)

DNEL Industry - Dermal; Long term systemic effects: 888 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 500 mg/m³
 Consumer - Dermal; Long term systemic effects: 319 mg/kg/day
 Consumer - Dermal; Long term systemic effects: 26 mg/kg/day
 Consumer - Inhalation; Long term systemic effects: 89 mg/m³

PNEC - Fresh water; 140.9 mg/l
 - Marine water; 140.9 mg/l
 - Intermittent release; 140.9 mg/l
 - Sediment (Freshwater); 552 mg/kg
 - Sediment (Marinewater); 552 mg/kg
 - STP; 2251 mg/l
 - Soil; 28 mg/kg

METHANOL (CAS: 67-56-1)

DNEL Industry - Dermal; Short term systemic effects: 40 mg/kg/day
 Industry - Inhalation; Short term systemic effects: 260 mg/m³
 Industry - Inhalation; Short term local effects: 260 mg/m³
 Industry - Dermal; Long term systemic effects: 40 mg/kg/day
 Industry - Inhalation; Long term systemic effects: 260 mg/m³
 Consumer - Inhalation; Long term local effects: 50 mg/m³
 Consumer - Dermal; Short term systemic effects: 8 mg/kg/day
 Consumer - Inhalation; Short term systemic effects: 50 mg/m³
 Consumer - Oral; Short term systemic effects: 8 mg/kg/day

PNEC - Fresh water; 154 mg/l
 - Marine water; 15.4
 - Sediment; 570.4 mg/kg
 - Soil; 23.5 mg/kg
 - STP; 100 mg/l
 - Intermittent release; 1540 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.

Personal protection

When using do not smoke.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The

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following protection should be worn: Chemical splash goggles.

Hand protection

Due to the packaging form, aerosol, risk of skin contact is small. Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Hygiene measures

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

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance

Aerosol.

Odour

Organic solvents.

Flash point

<-40°C

Upper/lower flammability or explosive limits

Lower : 1.8% - Upper 9.5%

Auto-ignition temperature

410-580°C

Comments

Information given is applicable to the major ingredient.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

Stability

Avoid the following conditions: Heat, sparks, flames.

10.3. Possibility of hazardous reactions

10.4. 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

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg)

778.81619938

Acute toxicity - dermal

ATE dermal (mg/kg)

11682.24299065

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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 should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

Eye contact

Vapour or spray in the eyes may cause irritation and smarting.

Acute and chronic health hazards

Arrhythmia (deviation from normal heart beat). In high concentrations, vapours and aerosol mists have a narcotic effect and may cause headache, fatigue, dizziness and 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.

SECTION 12: Ecological Information

Ecotoxicity

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

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information

Do not puncture or incinerate, even when empty.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Containers should be thoroughly emptied before disposal because of the risk of an explosion. Empty containers must not be punctured or incinerated because of the risk of an explosion.

SECTION 14: Transport information

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.

14.1. UN number

UN No. (ADR/RID)	1950
UN No. (IMDG)	1950
UN No. (ICAO)	1950

Combat**14.2. UN proper shipping name**

Proper shipping name (ADR/RID) AEROSOLS

Proper shipping name (IMDG) AEROSOLS

Proper shipping name (ICAO) AEROSOLS

Proper shipping name (ADN) AEROSOLS

14.3. Transport hazard class(es)

ADR/RID label 3

IMDG class 2.1

ICAO class/division 2.1

Transport labels**14.4. Packing group**

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Tunnel restriction code (D)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

EU legislation

Commission Regulation (EU) No 453/2010 of 20 May 2010.

Guidance

Workplace Exposure Limits EH40. CHIP for everyone HSG228. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. British Aerosol Manufacturers Code of Practice 7th. Edition 1999

15.2. Chemical safety assessment**SECTION 16: Other information**

Revision date 24/11/2014

Revision 1

SDS number 10232

SDS status Approved.

Risk phrases in full

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- R11 Highly flammable.
- R12 Extremely flammable.
- R21/22 Harmful in contact with skin and if swallowed.
- R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
- R36 Irritating to eyes.
- R38 Irritating to skin.
- R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed.
- R41 Risk of serious damage to eyes.
- R43 May cause sensitisation by skin contact.
- R50 Very toxic to aquatic organisms.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67 Vapours may cause drowsiness and dizziness.

Hazard statements in full

- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H229 Pressurised container: may burst if heated
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H311 Toxic in contact with skin.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H370 Causes damage to organs .
- H371 May cause damage to organs .
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- EUH208 Contains 4-chloro-3-methylphenol. May produce an allergic reaction.

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.