

## SAFETY DATA SHEET

### Circuit Bulk

#### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

##### 1.1. Product identifier

Product Name                                  Circuit Bulk

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

Identified uses                                  Solvent cleaner

##### 1.3. Details of the supplier of the safety data sheet

Supplier:    Aztec Chemicals  
 Gateway  
 Crewe  
 Cheshire  
 CW1 6YY  
 + 44 (0) 1270 655500 (T)  
  
 + 44 (0) 1270 655501 (F)  
 info@aztecchemicals.com

1.4. Emergency telephone number                                  +44 (0)7831300868

#### SECTION 2: HAZARDS IDENTIFICATION

##### 2.1. Classification of the substance or mixture

Classification (EC 1272/2008)	Physical and Chemical Hazards	Flam. Liq. 1 - H224
	Human health	EUH066;STOT Single 3 - H336; Asp. Tox. 1 - H304
	Environment	Aquatic Chronic 2 - H411
Classification (1999/45/EEC)	Xn;R65. F+;R12. N;R51/53. R66, R67.	

##### Human Health

May cause skin disorders if contact is repeated or prolonged.

##### Environment

The product contains a substance which is toxic to aquatic organisms and which may cause long term adverse effects in the aquatic environment.

##### Physical And Chemical Hazards

The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures.

##### 2.2. Label elements

Contains:    PENTANE

Label In Accordance With (EC) No. 1272/2008



Signal Word    Danger

##### Hazard Statements

H224	Extremely flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

##### Precautionary Statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

##### Supplementary Precautionary Statements

P233	Keep container tightly closed.
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P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/.../equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P301+310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P331	Do NOT induce vomiting.
P370+378	In case of fire: Use ... for extinction.
P391	Collect spillage.
P403+233	Store in a well-ventilated place. Keep container tightly closed.
P403+235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/container to ...
Supplemental Label Information (EU)	
EUH066	Repeated exposure may cause skin dryness or cracking.

### 2.3. Other hazards

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

PENTANE		60-100%
CAS-No.: 109-66-0		EC No.: 203-692-4
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Flam. Liq. 2 - H225	F+;R12	
EUH066	Xn;R65	
STOT Single 3 - H336	R66	
Asp. Tox. 1 - H304	R67	
Aquatic Chronic 2 - H411	N;R51/53	

The Full Text for all R-Phrases and Hazard Statements is Displayed in Section 16

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### General Information

NOTE! Effects may be delayed. Keep affected person under observation. NOTE! Keep affected person away from heat, sparks and flames!

#### Inhalation.

Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

#### Ingestion

Remove victim immediately from source of exposure. Rinse mouth thoroughly. NOTE! Keep affected person away from heat, sparks and flames! DO NOT induce vomiting. Get medical attention immediately.

#### Skin Contact

This product is designed for application to the skin and irritation is therefore not generally expected. Seek medical attention for persistent irritation.

#### 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.

### 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

#### Extinguishing Media

Use: Dry chemicals, sand, dolomite etc. Alcohol resistant foam. Water spray, fog or mist. Carbon dioxide (CO2).

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### 5.2. Special hazards arising from the substance or mixture

#### Unusual Fire & Explosion Hazards

Vapours are heavier than air and may spread near ground to sources of ignition.

#### Specific Hazards

Vapours may be ignited by a spark, a hot surface or an ember.

### 5.3. Advice for firefighters

#### Special Fire Fighting Procedures

Ventilate closed spaces before entering them. Move container from fire area if it can be done without risk. Use water to keep fire exposed containers cool and disperse vapours. Do not scatter spilled material with more water than needed to fight the fire. Be aware of danger for fire to re-start. Keep run-off water out of sewers and water sources. Dike for water control.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Do not smoke, use open fire or other sources of ignition. Avoid inhalation of vapours and contact with skin and eyes.

### 6.2. Environmental precautions

To prevent release, place container with damaged side up.

### 6.3. Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Stop leak if possible without risk. Ventilate well. Wear necessary protective equipment. Absorb in vermiculite, dry sand or earth and place into containers.

### 6.4. Reference to other sections

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Risk of vapour concentration on the floor and in low-lying areas. Use good earthing procedures when decanting from container. Avoid contact with eyes.

### 7.2. Conditions for safe storage, including any incompatibilities

Extremely flammable. Keep in original container. Store in tightly closed original container in a dry, cool and well-ventilated place.

#### Storage Class

Flammable liquid storage.

### 7.3. Specific end use(s)

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
PENTANE		600 ppm	1800 mg/m3			

mg/m3

#### Ingredient Comments

WEL = Workplace Exposure Limits

### 8.2. Exposure controls

#### Protective Equipment



#### Process Conditions

Provide eyewash station.

#### Engineering Measures

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

#### Respiratory Equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit. Use chemical cartridge protection with appropriate cartridge.

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### Eye Protection

Wear approved safety goggles.

### Hygiene Measures

Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

### Personal Protection

When using do not smoke

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Clear Gel
Colour	Colourless
Odour	Characteristic Hydrocarbon
Solubility	Immiscible with water
Initial Boiling Point and Boiling Range:	35 - 42
Relative Density	0.632 15
Vapour Density (Air=1)	>1
Vapour Pressure	56.3 kPa 20
pH-Value, Conc. Solution	7.0
Viscosity	0.41 mPas 25
Flash Point (°C)	<-45 deg C CC (Closed cup).
Auto Ignition Temperature (°C)	>200
Flammability Limit - Lower(%)	1.4
Flammability Limit - Upper(%)	7.8

### 9.2. Other information

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

### 10.4. Conditions to avoid

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

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

Fire creates: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Inhalation

Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting.

#### Ingestion.

May cause stomach pain or vomiting. Gastrointestinal symptoms, including upset stomach.

#### Skin Contact

Skin irritation is not anticipated when used normally. Prolonged contact may cause dryness of the skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.

#### Eye Contact

Irritating to eyes. Irritation, burning, lachrymation, blurred vision after liquid splash.

#### Health Warnings

Prolonged or repeated exposure may cause severe irritation. Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

#### Route of entry

Inhalation. Ingestion. Skin and/or eye contact.

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### Medical Symptoms

Irritation of eyes and mucous membranes. Dilated pupils. Rhinitis (inflammation of the nasal mucous membranes).

## SECTION 12: ECOLOGICAL INFORMATION

### Ecotoxicity:

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

### 12.1. Toxicity

### 12.2. Persistence and degradability

#### Degradability:

There are no data on the degradability of this product.

### 12.3. Bioaccumulative potential

### 12.4. Mobility in soil

#### Mobility:

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces.

### 12.5. Results of PBT and vPvB assessment

### 12.6. Other adverse effects

## SECTION 13: DISPOSAL CONSIDERATIONS

### General Information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

## SECTION 14: TRANSPORT INFORMATION

### 14.1. UN number

UN No. (ADR/RID/ADN)	1265
UN No. (IMDG)	1265
UN No. (ICAO)	1265

### 14.2 UN Proper shipping name

Proper Shipping Name	UN 1265 Pentanes, 3 PG1
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### 14.3 Transport hazard class(es)

ADR/RID/ADN Class	3
ADR/RID/ADN Class	Class 3: Flammable liquids.
ADR Label No.	3
IMDG Class	3
ICAO Class/Division	3
Transport Labels	



### 14.4. Packing group

ADR/RID/ADN Packing group	II
IMDG Packing group	II
ICAO Packing group	II

### 14.5. Environmental hazards

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Environmentally Hazardous Substance/Marine Pollutant  
No.

### 14.6. Special precautions for user

Hazard No. (ADR) 33 Highly flammable liquid (flash-point below 23°C).

### 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

#### Uk Regulatory References

The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments. Chemicals (Hazard Information & Packaging) Regulations.

#### Statutory Instruments

Control of Substances Hazardous to Health. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

#### Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

#### Guidance Notes

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

#### EU Legislation

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

#### National Regulations

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

### 15.2. Chemical Safety Assessment

## SECTION 16: OTHER INFORMATION

SDS No.	11356
Safety Data Sheet Status	Approved.
Date	17.11.2010
Risk Phrases In Full	
R12	Extremely flammable.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R65	Harmful: may cause lung damage if swallowed.
R66	Repeated exposure may cause skin dryness or cracking.
R67	Vapours may cause drowsiness and dizziness.
Hazard Statements In Full	
EUH066	Repeated exposure may cause skin dryness or cracking.
H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

#### 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.