

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
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

+44 (0)7831 300868

SECTION 2: HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture****Classification (EC 1272/2008)**

Physical and Chemical Hazards Flam. Liq. 2 - H225
Human health EUH066;STOT SE 3 - H336; Asp. Tox. 1 - H304
Environment Aquatic Chronic 2 - H411

Classification (67/548/EEC)

Xn;R65. F;R11. N;R51/53. R66, R67.

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

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.

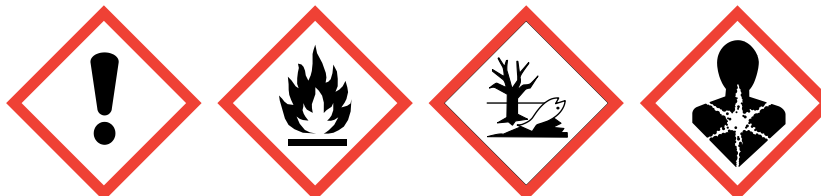
Physical and Chemical Hazards

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

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.

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P271 Use only outdoors or in a well-ventilated area.

Circuit Bulk

P273	Avoid release to the environment.
P280	Wear protective gloves.
P260	Do not breathe vapours.
P262	Do not get in eyes, on skin, or on clothing.
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308	IF exposed or concerned:
P315	Get immediate medical advice/attention.
P403+235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local regulations.
Supplementary Precautionary Statements	
P233	Keep container tightly closed.
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P405	Store locked up.
Supplemental label information	
EUH066	Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances**

PENTANE		60-100%
CAS-No.: 109-66-0	EC No.: 203-692-4	Registration Number: 01-2119459286-30
Classification (EC 1272/2008)	Classification (67/548/EEC)	
Flam. Liq. 2 - H225	F+;R12	
EUH066	Xn;R65	
STOT SE 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 are 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**

Circuit Bulk

5.1. Extinguishing media

Extinguishing media

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

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	WEL	600 ppm		750 ppm		

WEL = Workplace Exposure Limit.

Ingredient Comments

WEL = Workplace Exposure Limits

Circuit Bulk**PENTANE (CAS: 109-66-0)**

DNEL				
Industry	Dermal	Long Term	Systemic Effects	432 mg/kg/day
Industry	Inhalation.	Long Term	Systemic Effects	3000 mg/m3
Consumer	Oral	Long Term	Systemic Effects	214 mg/kg/day
Consumer	Dermal	Long Term	Systemic Effects	214 mg/kg/day
Consumer	Inhalation.	Long Term	Systemic Effects	643 mg/m3
PNEC				
Water	0.23	mg/l		
Sediment	1.2	mg/kg		
Soil	0.55	mg/kg		
STP	3.60	mg/l		

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.

Eye protection

Wear approved safety goggles.

Hygiene measures

Wash hands 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 (°C)	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.

Circuit Bulk

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 (CO₂).

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.

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

Circuit Bulk

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

General Packs of 1L or less are not regulated under the limited quantities provisions .

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 PENTANES (PENTANE)

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

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS F-E, S-D

Emergency Action Code 3YE

Hazard No. (ADR) 33

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

Tunnel Restriction Code (D/E)

Circuit Bulk

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 12.03.2014

Risk Phrases In Full

R12	Extremely flammable.
R65	Harmful: may cause lung damage if swallowed.
R11	Highly flammable
R66	Repeated exposure may cause skin dryness or cracking.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R67	Vapours may cause drowsiness and dizziness.

Hazard Statements In Full

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
EUH066	Repeated exposure may cause skin dryness or cracking.
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.