



## Castle Chemicals Limited

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### MATERIAL SAFETY DATA SHEET

#### DICYANDIAMIDE

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#### 1. IDENTIFICATION OF THE SUBSTANCE PREPARATION AND OF THE COMPANY UNDERTAKING.

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Product Name	Dicyandiamide
Supplier	Castle Chemicals, Peak House 6 Oxford Road, Altrincham, Cheshire WA14 2DY Tel: 0161 608 8800 Fax: 0161 608 1910

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#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

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##### Product Identification

CAS No	Ingredient	Range %	Classification
461-58-5	Dicyandiamide	99.5% min.	T: R23 Xn: R20 Xi: R36/38-43

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#### 3. HAZARD IDENTIFICATION

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Inhalation:	Toxic
Skin Contact:	Harmful
Eye Contact:	Irritant
Ingestion:	Non-toxic by ingestion in single doses

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#### 4. FIRST AID MEASURES

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Eyes	Irrigate thoroughly with water. Seek medical advice
Skin	Remove and wash contaminated clothing. Wash skin with soap and water.
Inhalation	Remove from exposure. Restore breathing, keep at rest, and seek immediate medical attention.

Ingestion Rinse mouth and drink immediately two or more glasses of water or milk. Seek immediate medical attention.  
Medical note: In combination with alcohol, is poisonous

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## 5. FIRE FIGHTING MEASURES

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Extinguisher media: Water in jets and fog  
Exposure hazards: Dicyandiamide is non-inflammable ammonia fumes are formed during thermal decomposition  
Protective equipment: Breathing apparatus, boots and PVC gloves

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## 6. ACCIDENTAL RELEASE MEASURES

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Personal precautions: Remove any ignition source. Wear PVC gloves, face mask and goggles.  
Environmental precautions: -  
Spillage control: absorb in damp earth or sand. Remove containers to a safe place.

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## 7. HANDLING & STORAGE

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Storage: Cool and Dry

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## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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Non- inflammable.  
No adverse side-effects have been reported.  
See guidance note EH 44. Dust in the workplace: General Principals of Protection, as well as Guidance Note CS3.  
Engineering measures need to be installed to maintain dust levels below the EH 40 limits.

For personal protection:

a: Respiratory -Wear face mask  
b: Hand -Wear PVC gloves  
c: Eye -Wear Safety glasses  
d: Skin -Wear non-absorbent clothing. Aprons to be made of PVC or rubber. Working clothes should be washed daily in water-based laundry systems.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance: White crystals or powder  
Odour: none  
pH: for all aqueous solutions 7.1  
Boiling point: -  
Melting point: 209 - 212  
Oxidising properties: -  
Bulk density 500 kg/m<sup>3</sup>  
Solubility in water at 20°C 35g/L  
Density 1.40 g/cm<sup>3</sup>  
Purity 99.52% min

Moisture	0.30% max
Ash	0.05% max
Calcium Content	200 ppm

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## 10. STABILITY AND REACTIVITY

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A strong exothermal reaction will occur above the melting point.

Conditions to avoid: Presence of any combustible products. Damp storage conditions. Ignition sources.

Materials to avoid: Reacts with acids and hydroxides.

Hazardous decomposition: Ammonia fumes

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## 11. TOXICOLOGICAL INFORMATION

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LD50 in mice:	12g /kg of body weight
Inhalation:	Dust irritates the air passages
Skin	Harmful
Eye	Irritant
Ingestion	Intake of alcohol increases the risk of poisoning

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## 12. ECOLOGICAL INFORMATION

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Toxicity to fish	-
Non-selectively toxic to plants:	-
Harmful to water organisms	-
Water polluting class 1(W.G.K.1)	
Toxic effects only appear at high doses with micro - organisms and higher developed organisms.	

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## 13. DISPOSAL CONSIDERATIONS

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Land fill or controlled incineration in an open area. Use only licensed waste hauliers and disposal contractors.

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## 14. TRANSPORT INFORMATION

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S. I. Number	-	ADR HIN:	-
Conveyance Classification:	-	IMCO Class:	-
Packing group:	-	IMCO Sub-risk	-
CUS No.		15209	
Hazchem code	-	IMDG page no:	-
Tremcard No.	-	Marine Pollutant	-
Einecs No.		207-312-8	

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## 15. REGULATORY INFORMATION

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Primary risk	Toxic	EMS No.	-
Harmful	harmful	MFAG No.	-
Label risk phrases:	R36, R38, R43, R23		

Label safety phrases	S3, S8, S25, S36-37, S41
CAS No.	461-58-5
EINECS No.	207-312-8
Customs Tariff	292 6 20-00
UK Customs No	15209
Chip Index No.	Not yet available

Recipients of this SDS must make their own assessment of workplace risk as required by other health and safety legislation.

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## 16. OTHER INFORMATION

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### References

EH40/91 Occupational Exposure limits 1991  
(ISBN 00 11 885580 8)

S.I. No 1709 The control of pollution (Special Waste) Regulations 1980 (ISBN 0 11 007709 1)  
The Control of Industrial Major Accident Hazard Regulations 1984

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990 S.I.No.2325 The Control of Industrial Major Accident Hazards (Amendment) Regulations 1990  
(ISBN 0 11 005325 7)

HS (G) 71 Storage of packaged dangerous substances (ISBN 0 11 885989 7)

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