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MATERIAL SAFETY DATA SHEET

MSDS # PMC/RC/012/06

Updated on 02-Jan-2006
Product Name ACCICURE DPG
Revision Number +REV02
UN Number 3077
CAS No. 102-06-7

Health Hazard :	2
Fire Hazard :	1
Reactivity :	0
Personal Protection :	X

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

PRODUCT NAME : ACCICURE DPG

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2. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT DESCRIPTION	1,3-Diphenylguanidine		
HAZARDOUS INGREDIENT(S)	CAS No.	Symbol	R Phrases
1,3-Diphenylguanidine	102-06-7	Xn,N	R22,36/37/38 R62/51/53

3. HAZARDS IDENTIFICATION

This health hazard assessment is based on a consideration of the composition of this product .

Irritating to eyes, harmful if swallowed or inhaled.
May cause sensitizations by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
In common with many organic compounds in powder form it can produce flammable dust clouds in air.

4. FIRST-AID MEASURES

Inhalation	Remove patient from exposure. Obtain medical attention if ill effects occur.
Skin Contact	Remove contaminated clothing. Wash skin immediately with plenty of soap and water. If symptoms (irritation or blistering) occur, obtain medical attention. Contaminated clothing should be laundered before re-use.
Eye Contact	Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
Ingestion	Do not induce vomiting. Wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Obtain medical attention.

Further Medical Treatment

Symptomatic treatment and supportive therapy as indicated.

5. FIRE-FIGHTING MEASURES

Requires only routine fire precautions

Combustible. The material can form flammable dust clouds in air. Take precautionary measures against static discharges.

Combustion products: Nitrogen oxides, carbon monoxide & carbon dioxide.

See **OTHER INFORMATION**

Extinguishing media	Water spray, foam, dry powder or CO ₂ . Do not use water jet. (Avoid dust generation.)
Fire Fighting Protective Equipment.	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions

6. ACCIDENTAL RELEASE MEASURES

Do not allow entering into drains, sewers or watercourses.
Control dust formation. (See 'Fire fighting measures'.).
Collect spillages by mechanical means.
Transfer to a container for disposal or recovery.

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Ensure suitable personal protection during removal of spillages.

Spillages or uncontrolled discharges into watercourses must be alerted to the appropriate regulatory body.

7. HANDLING AND STORAGE

7.1 HANDLING

Control dust formation. (See ' Fire fighting measures').

Avoid contact with skin and eyes.

Avoid inhalation of high concentrations of dusts. Atmospheric concentrations should be minimised and kept as low as reasonably practicable.

7.2 STORAGE

In common with many organic compounds in powder form it can produce flammable dust clouds in air.

Take precautionary measures against static discharges.

Keep away from oxidising agents, acids, alkalis, moisture, heat and direct sunlight.

Suitable containers : High density polyethylene (HDPE) laminated paper bags with polythene liner inside.

Storage Temperature	ambient
Storage Life	1 year(s)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Wear suitable gloves and eye/face protection.

Wear suitable respiratory protective equipment if exposure to high levels of dust are likely.

Occupational Exposure Limits

No Occupational Exposure Limit listed but 2.5 mg/m³ for total dust is recommended

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Powder
Colour	Off white
Odour	No discernible odour
Boiling Point (Deg C)	Decomposes above 170°C
Melting Point (Deg C)	144 min
Flash Point (Deg C)	157°C (Closed cup)
Flammable Limits	No data.
Auto Ignition	
Temperature (Deg C)	No data.
Explosive Properties	In common with many organic compounds in powder form it can produce flammable dust clouds in air.
Oxidising Properties	No data.
Vap Pressure (mm Hg)	No data.
Solubility (Water)	Insoluble
Solubility (Other)	Acetone & Toluene
Partition Coefficient	1.69 log P (Octanol/water)
Specific Gravity	1.19 (typical)
Molecular Weight	211.3
Molecular Formula	C13-H13-N3

10. STABILITY AND REACTIVITY

Stable under normal conditions.

Store below 50°C

Incompatible materials oxidising agents, acids and alkalis.

Hazardous Decomposition Product(s) See 'Fire fighting measures'.

See **OTHER INFORMATION**

11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity	LD50 (Rat) :	350 mg/kg
Acute Dermal Toxicity	LD50 (Rabbit) :	>2000 mg/kg

Inhalation Irritating to respiratory system. Combustion or thermal decomposition will evolve very toxic and irritant vapors.

Skin Contact May cause sensitisation by skin contact.

Eye Contact Irritating to eyes.

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Ingestion Harmful if swallowed.

Long Term Exposure See **OTHER INFORMATION**

12. ECOLOGICAL INFORMATION

This environmental hazard assessment is based on information available on the components of the formulation.

Environmental Fate and Distribution

Solid with low volatility.

The product is essentially insoluble in water.

The product has low potential for bioaccumulation.

Persistence and Degradation

Biodegradability (CO₂ evolution) : Highly biodegradable

Toxicity

Harmful to aquatic organisms.

Acute aquatic toxicity :

96 hrs LC50 Trout	:	11.0 gm/l	Slightly toxic
96 hrs LC50 Bluegill	:	9.5 gm/l	Moderately toxic
Acute Algae Toxicity	:	96 hr EC50 Algae – 1.7 mg/l	

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not Classified as Dangerous for Transport.

Marine Pollutant Not classified as a Marine Pollutant

15. REGULATORY INFORMATION

EC Classification Harmful, Hazard Symbol Xn

: Dangerous for the environment, N



Risk Phrases:	R51/53 toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment. R22 Harmful if swallowed. R36 Irritating to eyes. R37 Irritating to respiratory system. R38 Irritating to skin. R62 Risk of impaired fertility.
Safety Phrases:	S24 Avoid contact with skin. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S36 Wear suitable protective clothing. S60 This material and/its container must be disposed of as hazardous waste. S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

16. OTHER INFORMATION

HMIS rating: Health:	2
Flammability:	1
Reactivity:	0
PPI:	X

Legend	: 0(HMIS)	Minimal hazard
	1(HMIS)	Slight hazard
	2(HMIS)	Moderate hazard
	3(HMIS)	Serious hazard
	4(HMIS)	Severe hazard
	X(HMIS)	Personal protective rating to be supplied by user depending on the use conditions

Use: Mostly as secondary accelerator for rubber, primary accelerator for ebonites
Secondary gelling agent (foam stabiliser) in silicofluoride gelled latex foams.
Metal complexing agent in ore flotation & ink additive.

FDA : Regulated for use under section 21 CFR : 177.2600 , Rubber articles intended for repeated use in contact with food.

Special notes ; DPG is a strong base and is listed by the International Contact Dermatitis Group for routine skin patch testing in appropriate circumstances.
Incompatible with acids and oxidants.

Reference : Cronin E. Contact Dermatitis, London : Churchill Livingstone, 1980 : 731 - 2

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