



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

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

#### 1.1 Product Identifier

Product Name                                 Mercure DPG  
Synonym   N,N'-Diphenyl Guanidine

#### 1.2 Use of the Substance/Mixture

Identified uses                                 Rubber vulcanization accelerator

#### 1.3 Manufacturer or supplier's details

Company/Undertaking identification address         Merchem Limited  
Grove Centre,  
44- Development Plot,  
Kalamassery,  
Cochin – 683 109, Kerala, India  
Telephone   + 91-484-4089300  
Telefax   + 91-484-4089310

#### 1.4 Emergency Telephone Number

Emergency Telephone Number                         + 91-484-4089300

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification according to EU directives 67/548/EEC or 1999/45/EC

N Dangerous for the environment  
Xi Irritant  
Xn  
R22  
R36/37/38  
R51/53  
R62

EC Number: 203-002-1

Annex 1 Index Number: 612-149-00-4

##### REGULATION (EC) No. 1272/2008

**Classification of the substance or mixture**         Acute tox: Cat. 2; Acute tox: Cat. 4; Skin corrosion/irritation: Cat.2; Serious eye damage/eye irritation Cat 2A; Specific target organ toxicity, single exposure; Respiratory tract irritation: Cat 3; Reproductive toxicity Cat. 2

#### 2.2 Label elements

Product Name:   Mercure DPG



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

#### Hazard pictograms



#### Signal Word

Warning

#### Hazard Statements

- H302 Harmful if swallowed.  
H315 Causes skin irritation..  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H361 Suspected of damaging fertility.  
H411 Toxic to aquatic life with long lasting effects.

#### Precautionary Statements - Prevention

- P233 Keep container tightly closed.  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### Precautionary Statements - Response

- P391 Collect spillage. Hazardous to the aquatic environment  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### Precautionary Statements - storage

- P403+P233 store in a well ventilated place. Keep container closed

#### Precautionary Statements - Disposal

- P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements : None

#### 2.3 Other hazards

None

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical description : NN'-Diphenyl guanidine



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

#### Composition/Information on ingredients

Chemical Name	CAS No.	EC No.	Annex-1 Index No.	Weight %
NN'-Diphenyl guanidine	102-06-7	203-002-1	612-149-00-4	> 99

#### 3.2 Mixtures

Not applicable. Substance is not a mixture

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first-aid measures

- General Advice** If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Treat symptomatically. In case of allergic reaction after exposure, any future exposure must be avoided. Dust must be irritating to the respiratory tract
- Inhalation** : Move to fresh air, if symptoms persist, seek medical advice
- Skin Contact** : Wash immediately with soap and water
- Eye Contact** : Rinse immediately as long as a possible with plenty of water. Seek medical advice if irritation persist
- Ingestion** : Rinse mouth , Consult a physician.

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

Harmful if swallowed. Causes skin irritation.. Causes serious eye irritation. May cause respiratory irritation. Suspected of damaging fertility. Toxic to aquatic life with long lasting effects. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### 4.3 Indication of immediate medical attention and special treatment needed

No data available

### SECTION 5: FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Specific hazards arising from the substance or mixture

Carbon oxides(COx), nitrogen oxides (NOx)

#### 5.3 Protective Equipment and Precautions for Firefighters

Wear self contained breathing apparatus for fire fighting if necessary

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

#### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal

#### 6.4 Reference to other sections

See section 7, 8 and 13

### SECTION 7: HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

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

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

#### 7.3 Specific end uses

A part from the uses mentioned in section 1.2 no other specific uses are stipulated

### SECTION 8: EXPOSURE CONTROL/PERSONNEL PROTECTION

#### 8.1 Control parameters

Components with workplace control parameters

#### 8.2 Exposure controls

##### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

##### **Personal Protective Equipment:**

**Eye/face Protection** :Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin Protection** :Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

**Body Protection** :Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environmental exposure controls:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form	:solid powder
b) colour	:Light cream
c) Odour	:slightly amine like
d) pH	:No data available
e) Melting point/range	: 146-148°C
f) Boiling point /boiling range	: No data available
g) Flash point	: No data available
h) Explosive property	: No data available
i) Flammability (solid, gas)	: No data available
j) Explosion Limits	: No data available
k) Vapour pressure	: No data available
l) Specific gravity	: 1.2
m) Bulk density	: 280-320kg/m <sup>3</sup> (20 °C)
n) solubility	; Insoluble in water and soluble in Acetone and Alcohol
o) Partition coefficient	: No data available
p) Auto-ignition temperature	:>400°C
q) Decomposition temperature	:No data available
r) Viscosity	: No data available
s) Oxidizing properties	:No data available

### 9.2 Other information

No data available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

- No data available

### 10.2 Chemical Stability

- Stable under recommended storage and handling conditions (See section 7)

### 10.3 Possibility of hazardous reactions

- No data available

### 10.4 Conditions to Avoid

High temperature >100°C.Decomposes



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

#### 10.5 Incompatible materials to avoid

Strong oxidizing agents, Acids,

#### 10.6 Hazardous Decomposition Products

- Toxic fumes: Aniline, carbon monoxide (CO), nitrous gases (NO<sub>x</sub>), tetraphenylmelamine,

### SECTION 11: TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

<b>Acute oral toxicity</b> (LD50/oral/rat)	:	323 mg/kg
<b>Acute dermal toxicity</b> (LD50/dermal/rabbit)	:	>794 mg/Kg
<b>Eye irritation</b>	:	Irritating to eyes
<b>Skin irritation/Sensitization</b>	:	Slightly irritating to skin but not sufficient for Classification
<b>Mutagenic Effects</b>	:	Not Mutagenic
<b>Reproductive toxicity</b>	:	Suspected human reproductive toxicant
<b>Carcinogenic effects</b> :IARC greater	:	No component of this product present at levels than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

**Specific target organ toxicity - single exposure:** May cause respiratory irritation

### SECTION 12: ECOLOGICAL INFORMATION

#### 12.1 Ecotoxicity

**Ecotoxicity** ; 96h-LC50 (Oncorhynchus mykiss): 11.0 mg/l,

**Fish** : 96h-LC50 (Lepomis macrochirus): 9.6 mg/l,

: 96h-LC50 (Pimephales promelas): 4.2 mg/l.

**Daphnia** : 48h-EC50 (Daphnia magna): 17.0 mg/l.

**Algae** : 96h-EC50 (Selenastrum capricornutum, Cel count): 1.7 mg/l.

#### 12.2 Mobility in soil

No data available

#### 12.3 Persistence and degradability

No data available.

#### 12.4 Bioaccumulative Potential

No data available.

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

#### **12.6 Other adverse effects**

Toxic to aquatic life with long lasting effects.

#### **12.7 Other information**

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground. Also poisonous for fish and plankton in water bodies.

Very toxic for aquatic organisms

### SECTION 13: DISPOSAL CONSIDERATIONS

#### **13.1 Waste Disposal Method**

##### **Product**

Avoid discharge into the environment. This material and its container must be disposed of as hazardous waste.

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

##### **Contaminated Packing**

- Dispose off in accordance with local regulations

### SECTION 14: TRANSPORT INFORMATION

#### **14.1 Road transport (ADR/RID/ADN)**

<b>ADR/RID Class</b>	9
<b>UN-No</b>	3077
<b>Packing Group</b>	III
<b>"Hazard label"</b>	Hazardous for the environment
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (N,N'Diphenylguanidine)

#### **14.2 Sea transport (IMDG)**

<b>Class</b>	9
<b>UN-No</b>	3077
<b>Packing Group</b>	III
<b>Marine pollutant</b>	Yes
<b>"Hazard label"</b>	Hazardous for the environment
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (N,N'Diphenylguanidine)

#### **14.3 Air transport (ICAO-TI/IATA)**

<b>Class</b>	9
<b>UN-No</b>	3077
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (N,N'Diphenylguanidine)

#### **14.4 Other information**

No data available

#### **14.5 Environmental hazards**

Information on environmental hazards, if relevant, pls. see 14.1 - 14.3.

#### **14.6 Special precautions for user**

No data available



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE DPG  
MSDS No. 25/20.03.2015

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

### SECTION 15: REGULATORY INFORMATION

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation 1907/2006 REGULATION (EC) No 1272/2008

Classification according to EU directives 67/548/EEC or 1999/45/EC

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

### SECTION 16: OTHER INFORMATION

#### This data sheet contains changes from the previous version in section(s)

Issue No.	2
Issue date :	20.03.2015
Revision No.	0
Reason for revision	: Reviewed & revamped based on the guide lines of Regulation (EC) No 1907/2006

#### List of relevant R(isk)-phrase(s)

R22 Harmful if swallowed  
R36/37/38 Irritating to eyes ,respiratory system and skin  
R51/53 Toxic to aquatic organisms, may cause long term adverse effect in the aquatic environment  
R62 Possible risk of impaired fertility

#### List of relevant S(afety)-phrase(s)

S 26 In case of contact with eye rinse immediately with plenty of water and seek medical advice.  
S 36/37/39Wear suitable protective clothing, gloves and eyes/face protection

S61 Avoid release to the environment

#### Classification of dangerous substance directive (67/548/EEC)

N Dangerous for the environment  
Xi Irritant  
Xn Harmful

#### Training advice

Provide adequate information, instruction and training to operators

#### Further information for the material safety data sheet

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The 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, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

**End of Material Safety Data Sheet**