

Product:

Mixland+ DPG 80 GA

Page: 1 / 9

SDS No.: 100056-100 (Version 4.1)

Date 20.05.2016 (Cancel and replace : 17.12.2015)

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

1.1. Identification of the product

Identification of the mixture: Mixland+ DPG 80 GA

1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the Substance/Mixture :

Sector of use :	Product category :
Manufacture of General Rubber Goods SU11: Manufacture of rubber products	PC0: Cross-linking agent
Manufacture of Tyres SU11: Manufacture of rubber products	PC0: Cross-linking agent

1.3. Details of the supplier of the safety data sheet

Supplier

MLPC International
209, Avenue Charles Despiau
F-40370 RION-DES-LANDES
FRANCE
Tel. + 33 (0) 5 58 57 02 00
<http://www.mlpc-intl.com>
fds@mlpc-intl.com

1.4. Emergency telephone number

+44 (0) 1235 239 670 (Carechem24 – MLPC 29003) **Europe**
001866 928 0789 (Carechem24 – MLPC 29003) **Americas**
+65 3158 1074 (Carechem24 – MLPC 29003) **Asia-pacific region** (excluding China)
+86 400 6267911 **China mainland**

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008):

Oral: Acute toxicity, 3, H301
Serious eye damage, 2, H319
Reproductive toxicity, 2, H361
Specific target organ toxicity - single exposure, 3, H335
Skin irritation, 2, H315
Chronic aquatic toxicity, 2, H411

Additional information:

For the full text of the H, EUH-phrases mentioned in this Section, see Section 16.

2.2. Label elements

Label elements (REGULATION (EC) No 1272/2008):

Hazardous components which must be listed on the label:

1,3-diphenylguanidine

Hazard pictograms:



Signal word:

Danger

Hazard statements:

H301 : Toxic if swallowed.
 H319 : Causes serious eye irritation.
 H335 : May cause respiratory irritation.
 H315 : Causes skin irritation.
 H361f : Suspected of damaging fertility.
 H411 : Toxic to aquatic life with long lasting effects.

Precautionary statements:

Prevention:

P202 : Do not handle until all safety precautions have been read and understood.
 P273 : Avoid release to the environment.
 P280 : Wear eye protection/ face protection.

Response:

P301 + P310 : IF SWALLOWED: Immediately call a POISON CENTER/doctor.
 P337 + P313 : If eye irritation persists: Get medical advice/ attention.
 P305 + P351 + P338 : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Disposal:

P501 : Dispose of contents/ container to an approved incineration plant.

2.3. Other hazards : None.**Other:**

Results of PBT and vPvB assessment : According to REACH regulation, annex XIII, the substance does not meet PBT and vPvB criteria.

3. COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures****Chemical nature of the mixture¹:**

Preparation based on polymers and

Hazardous components (accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s)) :

Chemical name ¹ & REACH Registration Number ²	EC-No.	CAS-No.	Concentration	Classification REGULATION (EC) No 1272/2008
1,3-Diphenylguanidine (01-2119519144-47) (N° ANNEX: 612-149-00-4)	203-002-1	102-06-7	<= 80 %	Acute Tox. 4 (Oral); H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 2; H361f STOT SE 3; H335 Aquatic Chronic 2; H411
Distillates (petroleum), hydrotreated light paraffinic (01-2119487077-29) (N° ANNEX: 649-468-00-3)	265-158-7	64742-55-8	>= 10 %	AH 1; H304 Nota L: DMSO <3%

¹: See chapter 14 for Proper Shipping Name

²: See the text of the regulation for applicable exceptions or provisions : The transition time according to REACH Regulation, Article 23, is still not expired.

For the full text of the H, EUH-phrases mentioned in this Section, see Section 16.

4. FIRST AID MEASURES**4.1. Description of necessary first-aid measures:****General advice:**

Take off immediately all contaminated clothing.

Inhalation:

Move to fresh air. Consult a physician.

Skin contact:

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Eye contact:

Wash well-open eyes immediately, abundantly and thoroughly with water. Consult an ophthalmologist.

Ingestion:

Call a physician immediately. Do not induce vomiting without medical advice. Rinse mouth.

Protection of first-aiders:

If entering a saturated atmosphere, wear a self contained breathing apparatus.

4.2. Most important symptoms/effects, acute and delayed: No data available.

4.3. Indication of immediate medical attention and special treatment needed, if necessary: No data available.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water spray, Foam, Dry powder

Unsuitable extinguishing media: All other extinguishants

5.2. Special hazards arising from the substance or mixture:

Thermal decomposition gives : Nitrogen oxides (NOx), Sulphur oxides, Carbon oxides

5.3. Advice for firefighters:

Specific methods:

Suppress gases, fumes and/or dust with water spray jet. Remove all sources of ignition.

Special protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures:

Avoid contact with skin and eyes and inhalation of dust.

6.2. Environmental precautions:

Do not let product enter drains. Do not contaminate surface water.

6.3. Methods and materials for containment and cleaning up:

Recovery:

Shovel or sweep up. Recover the product and place in a dry labelled container.

Elimination:

Dispose of as hazardous waste in compliance with local and national regulations.

6.4. Reference to other sections: None.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling:

Technical measures/Precautions:

Storage and handling precautions applicable to products: Dust forming. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Provide water supplies, ocular fountains and showers near the point of use.

Safe handling advice:

In case of dust formation, wear a dust mask. Avoid static electricity build up with connection to earth.

Hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with the skin and the eyes. Wash hands after handling. Remove contaminated clothing and protective equipment before entering eating areas.

7.2. Conditions for safe storage, including any incompatibilities:

Store protected from moisture and heat. Protect from light. Keep away from direct sunlight.

Incompatible products:

Strong acids, Oxidizing agents

Packaging material:

Recommended: Cardboard lined with polyethylene liner, Paper bags lined with polyethylene

7.3. **Specific end use(s):** None.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. **Control parameters:**

Exposure Limit Values

Distillates (petroleum), hydrotreated light paraffinic

Source	Date	Value type	Value (ppm)	Value (mg/m3)	Remarks
EU SCOELS	2014	TWA	–	5	8 hours Inhalable
EU SCOELS	2014		–	–	Inhalable Listed
ACGIH (US)	02 2012		–	–	Exposure by all routes should be carefully controlled to levels as low as possible.
ACGIH (US)	02 2012		–	–	Included in the regulation but with no data values. See regulation for further details.

Distillates (petroleum), hydrotreated light paraffinic

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ACGIH (US)	02 2012		–	–	Included in the regulation but with no data values. See regulation for further details.

Derived No Effect Level (DNEL):

End Use	Inhalation	Ingestion	Skin contact
Workers	1,20 mg/m3 (LT, SE)		1,7 mg/kg bw/day (LT, SE)
Consumers	0,30 mg/m3 (LT, SE)	0,085 mg/kg bw/day (LT, SE)	0,85 mg/kg bw/day (LT, SE)

LE : Local effects, SE : Systemic effects, LT : Long term, ST : Short term

Predicted No Effect Concentration:

Compartment:	Value:
Fresh water	0,030 mg/l
Marine water	0,003 mg/l
Water (Intermittent release)	0,014 mg/l
Effects on waste water treatment plants	1,47 mg/l
Fresh water sediment	14,9 mg/kg dw
Marine sediment	1,49 mg/kg dw
Soil	0,404 mg/kg dw
Oral (Secondary Poisoning)	3,78 mg/kg food

8.2. **Exposure controls:**

General protective measures: Ensure sufficient air exchange and/or exhaust in work areas

Personal protective equipment:

Respiratory protection: Effective dust mask
 Hand protection: Impervious gloves
 Eye/face protection: Tightly fitting safety goggles
 Skin and body protection: Protective suit

Environmental exposure controls: See chapter 6

9. PHYSICAL AND CHEMICAL PROPERTIES

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

Appearance:

Physical state (20°C): solid

Form:	granules, or, roll
Colour:	violet
Granulometry:	D50 : 0,026 mm powder D10 : 0,010 mm powder D90 : 0,045 mm powder
Odour:	slight
Olfactory threshold:	No data available.
pH:	Not applicable
Melting point :	149 °C (OECD Test Guideline 102)
Boiling point/boiling range :	> 250 °C (OECD Test Guideline 103)
Flash point:	Not applicable
Evaporation rate:	No data available.
Flammability (solid, gas):	
Flammability:	Not applicable
Lower flammable limit :	No data available
Upper flammable limit :	No data available
Vapour pressure:	< 0,0000001 hPa , at 25 °C (OECD Test Guideline 104)
Vapour density:	No data available.
Density:	1,13 g/cm ³ , at 20 °C
Bulk density:	348 kg/m ³ , at 20 °C powder
Water solubility:	0,325 g/l at 20 °C (OECD Test Guideline 105)
Partition coefficient: n-octanol/water:	log Kow : 2,42 (OECD Test Guideline 107)
Auto-ignition temperature:	Not applicable
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	
Explosivity:	Not explosive, Not relevant (due to the chemical structure)
Oxidizing properties:	No data available.

9.2. Other data:

Solubility in other solvents:	Alcohols , Acetone , Chloroform
Surface tension:	58,8 mN/m at 23 °C
pKA:	10,13 at 20 °C pKa1
Henry constant:	= = 50E-06 Pa.m ³ /mol , at 20 °C (measured)

10. STABILITY AND REACTIVITY

10.1. **Reactivity:** No data available.

10.2. Chemical stability:

The product is stable under normal handling and storage conditions.

10.3. **Possibility of hazardous reactions:** No data available.

10.4. Conditions to avoid:

Store protected from moisture and heat. Protect from light. Keep away from direct sunlight.

10.5. Incompatible materials to avoid:

Strong acids and strong bases

10.6. Hazardous decomposition products:

Nitrogen oxides (NOx), Carbon dioxide (CO₂), Sulphur oxides

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects:

Acute toxicity:

Inhalation:	According to limited available data
• In animals :	No mortality/30 min/dog, guinea pig: 0,5 mg/l
Ingestion:	Toxic if swallowed.
• In animals :	LD50/Rat: 107 mg/kg (Method: OECD Test Guideline 401)
Dermal:	Slightly harmful in contact with skin
• In animals :	No mortality/Rabbit: 2.000 mg/kg

Local effects (Corrosion / Irritation / Serious eye damage):

Skin contact:	Non irritating to skin
• In animals :	No skin irritation (after occlusive contact, Rabbit, Exposure time: 24 h)
Eye contact:	Severely irritating, or even corrosive, to eyes
• In animals :	Severe eye irritation (Draize Test, Rabbit)

Respiratory or skin sensitisation:

Inhalation:	No data available.
Skin contact:	Not a skin sensitizer
• In man :	Some cases of cutaneous sensitization reported
• In animals :	No skin allergy was observed (Method: OECD Test Guideline 406 Guinea pig maximization test)

CMR effects :

Mutagenicity: **According to available experimental data: Not genotoxic**

In vitro

Inactive in genotoxic in vitro tests
Ames test in vitro: (Method: OECD Test Guideline 471)
Tests for chromosome aberrations in vitro on mammalian cells: (Method: OECD Test Guideline 473)
In vitro gene mutations test on mammalian cells:

In vivo

Micronucleus test in vivo mouse: Inactive

Carcinogenicity: **Based on the available data, the substance is not suspected of having carcinogenic potential**

Reproductive toxicity:

Fertility: **Suspected of damaging fertility.**

• In animals :
No toxic effects for reproduction
NOAEL (Fertility) : > 25 mg/kg bw/day
(Method: OECD Test Guideline 421, Rat, By oral route)
Absence of toxic effects upon the reproductive system
(By diet, 3 Months)
NOAEL (Parental toxicity) : 32 mg/kg bw/day
NOAEL (Fertility) : 32 mg/kg bw/day
NOAEL (Developmental Toxicity) : 32 mg/kg bw/day
(Rat)
NOAEL (Parental toxicity) : 114 mg/kg bw/day
NOAEL (Fertility) : 114 mg/kg bw/day
NOAEL (Developmental Toxicity) : 114 mg/kg bw/day
(Mouse)

Foetal development: **Based on the available data, the substance is not suspected of having developmental toxicity potential.**

• In animals :
(Method: OECD Test Guideline 414, By oral route)

Absence of toxic effects for foetal development at non toxic maternal doses
 NOAEL (Developmental Toxicity): 25 mg/kg bw/day
 NOAEL (Maternal Toxicity): 5 mg/kg bw/day
 (Rat)
 Absence of toxic effects for foetal development
 NOAEL (Developmental Toxicity): 10 mg/kg bw/day
 NOAEL (Maternal Toxicity): 10 mg/kg bw/day
 (Mouse)

Specific target organ toxicity :**Single exposure :**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Inhalation:

At high concentrations , Dust inhalation:, Possible irritation of respiratory system

Repeated exposure:

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

• In animals :

By diet: No specific toxic effects
 NOAEL= 17mg/kg bw/day (Method: OECD Test Guideline 408, Rat, 3 months)

Aspiration hazard:

Not relevant

12. ECOLOGICAL INFORMATION

Ecotoxicology Assessment:

All available data on this product and/or the components quoted in section 3 and/or the analogue substances/metabolites have been taken into account for the hazard assessment.

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

12.1. Toxicity :**Fish:**

Toxic to fish.
 LC50, 96 h (Pimephales promelas (fathead minnow)) : 4,2 mg/l (Method: US EPA)

Aquatic invertebrates:

Harmful to daphnia.
 EC50, 48 h (Daphnia magna (Water flea)) : 17 mg/l (Method: US EPA, Immobilization)

Aquatic plants:

Toxic to algae.
 EC50, 96 h (Selenastrum capricornutum) : 1,7 mg/l (Method: US EPA, Biomass)

Microorganisms:

EC50, 3 h (Activated sludge) : 147 mg/l (Method: OECD Test Guideline 209, Respiration inhibition)

Aquatic toxicity / Long term toxicity:**Fish:**

NOEC, 34 d (Pimephales promelas (fathead minnow)) : 1,3 mg/l (Method: OECD Test Guideline 210)

Aquatic invertebrates:

NOEC, 21 d (Daphnia magna (Water flea)) : 0,6 mg/l (Method: OECD Test Guideline 211, Reproduction inhibition)

Aquatic plants:

NOEC, 96 h (Selenastrum capricornutum) : 0,3 mg/l (Method: US EPA, Growth inhibition)

12.2. Persistence and degradability :**Stability in water:**

Not hydrolysable

Biodegradation (In water):

Not readily biodegradable., Inherently biodegradable.

12.3. Bioaccumulative potential :**Bioaccumulation:**

Not bioaccumulable
 Partition coefficient: n-octanol/water: log Kow : 2,42 (Method: OECD Test Guideline 107)
 Bioconcentration factor (BCF): < 20 (42 d, 25 °C, Method: OECD Test Guideline 305 C, Cyprinus carpio (Carp))

12.4. Mobility in soil - Distribution among environmental compartments:**Henry constant:**

Surface tension: = 50E-06 Pa.m³/mol, 20 °C, (Method: measured)
58,8 mN/m 23 °C

Absorption / desorption: Koc: 4928 (Method: calculated)

12.5. Results of PBT and vPvB assessment :

According to REACH regulation, annex XIII, the substance does not meet PBT and vPvB criteria.

12.6. Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment:

Disposal of product: Destroy the product by incineration (in accordance with local and national regulations).

Disposal of packaging: Destroy packaging by incineration at an approved waste disposal site (in accordance with local and national regulations).

14. TRANSPORT INFORMATION

Regulation	14.1. UN number	14.2. UN proper shipping name	14.3. Class*	Label	14.4. PG*	14.5. Environmental hazards	14.6. Special precautions for user
ADR	2811	TOXIC SOLID, ORGANIC, N.O.S.(1,3 DIPHENYLGUANIDINE)	6.1	6.1	III	yes	
ADN	2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1	6.1	III	yes	
RID	2811	TOXIC SOLID, ORGANIC, N.O.S. (1,3 DIPHENYLGUANIDINE)	6.1	6.1	III	yes	
IATA Cargo	2811	Toxic solid, organic, n.o.s. (1,3 DIPHENYLGUANIDINE)	6.1	6.1	III	yes	
IATA Passenger	2811	Toxic solid, organic, n.o.s. (1,3 DIPHENYLGUANIDINE)	6.1	6.1	III	yes	
IMDG	2811	TOXIC SOLID, ORGANIC, N.O.S. (1,3 DIPHENYLGUANIDINE)	6.1	6.1	III	Marine pollutant	EmS Number: F-A, S-A Mark: MP

*Description: 14.3. Transport hazard class(es)
14.4. Packing group

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15. REGULATORY INFORMATION

Safety data sheets: accordance with Annex II of Regulation (EC) No 1907/2006 and its amendment(s)

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

15.2. Chemical safety assessment: None.

INVENTORIES:

EINECS: Conforms to
TSCA: Conforms to
AICS: Conforms to
DSL: This product contains one or several components that are not on the Canadian DSL nor NDSL lists.
ENCS (JP): Does not conform
KECI (KR): Conforms to
PICCS (PH): Conforms to
IECSC (CN): Conforms to
NZIOC: Conforms to

16. OTHER INFORMATION

Full text of H, EUH-phrases referred to under sections 2 and 3

H301 Toxic if swallowed.
H302 Harmful if swallowed.

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H361	Suspected of damaging fertility or the unborn child.
H361f	Suspected of damaging fertility.
H411	Toxic to aquatic life with long lasting effects.

Update:

Safety datasheet sections which have been updated:		Type:
3	REACH Registration Number	Additions

Thesaurus:

NOAEL : No Observed Adverse Effect Level (NOAEL)
 LOAEL : Lowest Observed Adverse Effect Level (LOAEL)
 bw : Body weight
 food : oral feed
 dw : Dry weight
 vPvB : very Persistent and very Bioaccumulative
 PBT : Persistent, Bioaccumulative and Toxic

This information applies to the PRODUCT AS SUCH and conforming to specifications of ARKEMA. In case of formulations or mixtures, it is necessary to ascertain that a new danger will not appear. The information contained is based on our knowledge of the product, at the date of publishing and it is given quite sincerely. Users are advised of possible additional hazards when the product is used in applications for which it was not intended. This sheet shall only be used and reproduced for prevention and security purposes. The references to legislative, regulatory and codes of practice documents cannot be considered as exhaustive. It is the responsibility of the person receiving the product to refer to the totality of the official documents concerning the use, the possession and the handling of the product. It is also the responsibility of the handlers of the product to pass on to any subsequent persons who will come into contact with the product (usage, storage, cleaning of containers, other processes) the totality of the information contained within this safety data sheet and necessary for safety at work, the protection of health and the protection of environment.

NB: In this document the numerical separator of the thousands is the "." (point), the decimal separator is "," (comma).