

Sovchem® DPG





1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION	
Manufacturer Sovereign Chemical Company 4040 Embassy Parkway, Suite 190 Akron, OH 44333	Emergency Contact Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)
Trade Name(s): Sovchem® DPG Granule, Sovchem® DPG Oiled Powder, Sovchem® DPG Powder	Synonyms: Diphenylguanidine
Chemical Name: Guanidine, N, N'-diphenyl	CAS Number: 102-06-7
Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.	Application of the substance/the preparation: Chemicals for synthesis.
Issued By: Sovereign Chemical Company According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	SDS Number: 1739 Date of Issue: April 7, 2015 Revision Number: 3 (Supersedes June 1, 2010) Change(s): Update to GHS requirement.

2. HAZARDS IDENTIFICATION


2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008: The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H361f, H411.

The following hazard statements are applicable only to OSHA(*USA) regulations and not the specific CLP regulation: H361.

	H361:	Suspected of damaging fertility or the unborn child.
	GHS08 Repr.2	Health hazard H361f Suspected of damaging fertility
	GHS09 Environment Aquatic Chronic 2	H411 Toxic to aquatic life with long lasting effects
	GHS07 Acute Tox. 4 Skin Irrit. 2 Eye Irrit. 2 STOT SE 3	H302 Harmful if swallowed. H315 Causes skin irritation. H319 Causes serious eye irritation. H335 May cause respiratory irritation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

	Xn; Harmful R22-62	Harmful if swallowed. Possible risk of impaired fertility.
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Xi; Irritant
 R36/37/38 Irritating to eyes, respiratory system and skin.



N; Dangerous for the environment.
 R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Information concerning particular hazards for human and environment: Not applicable.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

Hazard pictograms



GHS07



GHS08



GHS09

Signal word: Warning

Hazard-determining components of labeling: 1,3-diphenylguanidine

Hazard statements

The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation:

H361f.

H361 Suspected of damaging fertility or the unborn child. (General GHS and USA only)

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H361f Suspected of damaging fertility.

H335 May cause respiratory irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P281 Use personal protective equipment as required.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P261 Avoid breathing dust.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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

Hazard description

WHMIS-symbols



D2A – Very toxic material causing other toxic effects

NFPA ratings (scale 0-4)



Health = 2
Fire = 1
Reactivity = 0

HMIS ratings (scale 0-4)

HEALTH	*2
FIRE	1
REACTIVITY	0

Health = *2
Fire = 1
Reactivity = 0

* - Indicates a long-term health hazard from repeated or prolonged exposures.
HMIS Long Term Health Hazard Substances: Substance is not listed.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

CAS No., Description: 102-06-7, 1,3-diphenylguanidine

Identification number(s)

EC number: 203-002-1

Index number: 612-149-00-4

4. FIRST AID MEASURES

4.1 Description of first aid measures

General information: Symptoms of poisoning may even occur after several hours; therefore, medical observation for at least 48 hours after the accident.

After inhalation

Supply fresh air.

Seek immediate medical advice.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Nausea

Cramp

Thirst

Disorientation

Allergic reactions

Hazards

Danger of convulsion.
Danger of circulatory collapse.
Danger of disturbed cardiac rhythm.
Condition may deteriorate with alcohol consumption.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with added, activated carbon.
Severe allergic skin reaction, bronchial spasms and anaphylactic shock are possible.
Treat skin and mucous membrane with antihistamine and corticoid preparations.
In cases of irritation to the lungs, initial treatment with cortical steroid inhalants.
Monitor circulation, possible shock treatment.
If necessary oxygen respiration treatment.
Later observation for pneumonia and pulmonary edema.
If blue coloring appears (lips, ear-lobes, finger-nails), give oxygen treatment as quickly as possible.
Medical supervision for at least 48 hours.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
For safety reasons, unsuitable extinguishing agents: None.

5.2 Special hazards arising from the substance or mixture: During heating or in case of fire poisonous gases are produced.

5.3 Advice for firefighters

Protective equipment

Wear self-contained respiratory protective device.

Wear fully protective suit.

Additional information: Cool endangered receptacles with water spray.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use respiratory protective device against the effects of fumes/dust/aerosol.

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

6.2 Environmental precautions

Damp down dust with water spray.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up

Pick up mechanically.

Send for recovery or disposal in suitable receptacles

Dispose contaminated material as waste according to Section 13.

6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Prevent formation of dust.

Any unavoidable deposit of dust must be regularly removed.

Ensure good ventilation/exhaustion at the workplace.

No special precautions are necessary if used correctly.

Information about fire and explosion protection: Keep respiratory protective device available.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and receptacles

Store in a cool location.

Avoid storage near extreme heat, ignition sources or open flame.

Provide ventilation for receptacles.

Information about storage in one common storage facility

Do not store together with acids.

Store away from foodstuffs.

Store away from oxidizing agents.

Further information about storage conditions

Store in cool, dry conditions in well-sealed receptacles.

Store receptacle in a well-ventilated area.

Keep container tightly sealed.

7.3 Specific end use(s): No further relevant information available.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Additional information about design of technical facilities: No further data; see item 7.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace: Not required.

DNELs: No further relevant information available.

PNECs: No further relevant information available.

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment

General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Respiratory protection

Suitable respiratory protective device recommended.

Use suitable respiratory protective device in case of insufficient ventilation.

Use suitable respiratory protective device when high concentrations are present.

Protection of hands



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests, no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Material of gloves

- Neoprene gloves
- Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection



Safety glasses

Body protection: Protective work clothing.

Limitation and supervision of exposure into the environment: No further relevant information available.

Risk management measures

- See Section 7 for additional information.
- No further relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

General Information

Appearance Form: Solid. Color: Not determined.	Change in Condition Melting Point/Melting Range: 300 °F / 149 °C (Approx.). Boiling Point/Boiling Range: Undetermined.
Odor: Characteristic.	Octanol/Water Partition Coefficient: Not determined.
Odor threshold: Not determined.	pH Value: Not applicable.
Vapor pressure: Not applicable.	Flash point: Not applicable.
Density at 20 °C: 1.18 g/cm³.	Flammability (solid, gaseous): Product is not flammable.
Relative density: Not determined.	Ignition temperature: Not determined.
Vapor density: Not applicable.	Decomposition temperature: Not determined.
Evaporation rate: Not applicable.	Self-igniting: Not determined.
Solubility in / Miscibility with water: Soluble.	Danger of explosion: Product does not present an explosion hazard.
Viscosity Dynamic: Not applicable. Kinematic: Not applicable.	Explosion limits Lower: Not determined. Upper: Not determined.
Solvent content: Organic solvents: Not determined.	Solids content: Not determined.

9.2 Other information: No further relevant information available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

10.2 Chemical stability

Thermal decomposition/conditions to be avoided: No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

As the product is supplied it is not capable of dust explosion; however, enrichment with fine dust causes risk of dust explosion.

Toxic fumes may be released if heated above the decomposition point.

Reacts with strong acids.

Reacts with strong oxidizing agents.

10.4 Conditions to avoid: Keep away from heat and direct sunlight.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products

Nitrogen oxides.

Carbon monoxide and carbon dioxide.

Hydrogen cyanide (prussic acid).

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Primary irritant effect

On the skin: Irritant to skin and mucous membranes.

On the eye: Irritating effect.

Sensitization: Sensitizing effect by skin contact is possible by prolonged exposure.

Subacute to chronic toxicity

Irritant

Toxic and/or corrosive effects may be delayed up to 24 hours.

Additional toxicological information: Product is suspected to cause damage to fertility.

Sensitization: Sensitization possible by skin contact.

Repeated dose toxicity: May cause damage to organs through prolonged or repeated exposure.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction): Repr. 2

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity: The material is harmful to the environment.

12.2 Persistence and degradability: Not easily biodegradable.

12.3 Bio-accumulative potential: May be accumulated in organism.

12.4 Mobility in soil: No further relevant information available.

Ecotoxicological effects

Remark: Toxic for fish.

Additional ecological information

General notes

This statement was deduced from the properties of the single components.

Avoid transfer into the environment.

Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment cannot be excluded.

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water

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.

Toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6 Other adverse effects: No further relevant information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Recommendation

Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Un-cleaned packaging

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14. TRANSPORTATION INFORMATION

14.1 UN-Number

DOT	N/A
ADR, IMDG, IATA	UN3077

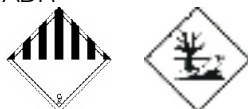
14.2 UN proper shipping name:

DOT	N/A
ADR	3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID, N.O.S (1,3-diphenylguanidine)
IMDG	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,3-diphenylguanidine), MARINE POLLUTANT
IATA	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,3-diphenylguanidine)

14.3 Transport hazard class(es)

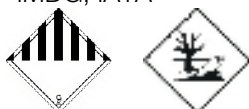
DOT Class N/A

ADR



Class: 9 (M7) Miscellaneous dangerous substances and articles.
Label: 9

IMDG, IATA



Class: 9 Miscellaneous dangerous substances and articles.
Label: 9

14.4 Packing group

DOT N/A

ADR, IMDG, IATA III

14.5 Environmental hazards

Product contains environmentally hazardous substances:

1,3-diphenylguanidine

Marine pollutant Yes

Symbol (fish and tree)

Special Marking (ADR) Symbol (fish and tree)

Special Marking (IATA) Symbol (fish and tree)

14.6 Special precautions for user Warning: Miscellaneous dangerous substances and articles

Danger code (Kemler) 90

EMS Number F-A, S-F.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

Transport/Additional information

ADR

Limited quantities (LQ) 5 kg

Transport category 3

Tunnel restriction code E

UN "Model Regulation" UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (1,3-diphenylguanidine), 9, III

15. REGULATORY INFORMATION

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

United States (USA)	
SARA Section 355 (extremely hazardous substances)	Substance is not listed.
SARA Section 313 (Specific toxic chemical listings)	Substance is not listed.
TSCA (Toxic Substances Control Act)	Substance is listed.
Proposition 65 (California)	
Chemicals known to cause cancer	Substance is not listed.
Chemicals known to cause reproductive toxicity for females	Substance is not listed.
Chemicals known to cause reproductive toxicity for males	Substance is not listed.

Chemicals known to cause developmental toxicity	Substance is not listed.
Carcinogenic Categories	
EPA (Environmental Protection Agency)	Substance is not listed.
IARC (International Agency for Research on Cancer)	Substance is not listed.
TLV (Threshold Limit Value established by ACGIH)	Substance is not listed.
NIOSH-Ca (National Institute for Occupational Safety and Health)	Substance is not listed.
OSHA-Ca (Occupational Safety & Health Administration)	Substance is not listed.
Canada	
Canadian Domestic Substances List (DSL)	Substance is listed.
Canadian Ingredient Disclosure list (limit 0.1%)	Substance is not listed.
Canadian Ingredient Disclosure list (limit 1%)	Substance is not listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labeling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

WHMIS: Workplace Hazardous Materials Information System (Canada)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)