

# Sovchem<sup>®</sup> DOTG

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION		
Manufacturer Sovereign Chemical Company 1225 West Market Street Akron, OH 44313	Emergency Contact Chemtrec: 1-800-424-9300 (continental USA) (1)703-527-3887 (outside continental USA)	
Trade Name(s): Sovchem® DOTG Oiled Powder	Synonyms: Diorthotolyl guanidine	
Chemical Name: Guanidine,N,N'-bis(2-methylphenyl)	CAS Number: 97-39-2	
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	SDS Number: 1791	
According to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and GHS	Date of Issue: April 13, 2016 Revision Number: 3 (supersedes May 24, 2013) Change(s): Revise to industry category.	

## 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



H350 May cause cancer.



H301 Toxic if swallowed.



H319 Causes serious eve iniurv.

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



T; Toxic R45: May cause cancer



Xn; Harmful R22: Harmful if swallowed.

Information concerning particular hazards for human and environment: The product has to be labeled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system: The classification is according to the latest editions of the EU-lists, and extended by company and literature data. The classification is in accordance with the latest editions of international



substances lists, and is supplemented by information from technical literature and by information provided by the company.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008

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

GHS06

Hazard pictograms





GHS07 (

Signal word Danger Hazard-determining components of labeling

1,3-di-o-tolylguanidine o-toluidine

Hazard statements

H301 Toxic if swallowed.

H319 Causes serious eye injury.

H350 May cause cancer.

Precautionary statements

- P281 Use personal protective equipment as required.
- P264 Wash thoroughly after handling.
- P202 Do not handle until all safety precautions have been read and understood.
- P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P330 Rinse mouth.

Additional information: Restricted to professional users.

Hazard description

WHMIS-symbols

D1B - Toxic material causing immediate and serious toxic effects

D2A - Very toxic material causing other toxic effects



NFPA ratings (scale 0-4)

HMIS ratings (scale 0-4)



Health = 2 Fire = 1 Reactivity =0



\*- Indicates a long-term health hazard from repeated or prolonged exposures.

HMIS Long Term Health Hazard Substances: 95-53-4 o-toluidine

#### 2.3 Other hazards Results of PBT and vPvB assessment PBT: Not applicable.



vPvB: Not applicable.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Description: Mixture of substances listed below with nonhazardous additions.

ļ	Dai	nę	gerous	components

Bangereae cempenente		
CAS: 97-39-2	<u>1</u> ,3-di-o-tolylguanidine	>75%
EINECS: 202-577-6	Xn R22	
	Acute Tox. 4, H302	
CAS: 8042-47-5	White Mineral Oil	<10%
EINECS: 232-455-8	🗙 Xn R65	
	🕹 Asp. Tox. 1, H304	
CAS: 95-53-4	o-toluidine	<1.0%
EINECS: 202-429-0 Index number: 612-091-00-X	💆 T Carc. Cat. 2 R45-23/25; 🗙 Xi R36; 峚 N R50	
	Acute Tox. 3, H301; Acute Tox. 3, H331	
	🚱 Carc. 1B, H350	
	Aquatic Acute 1, H400	
	Eye Irrit. 2, H319	

SVHC

95-53-4 o-toluidine

Additional information: For the wording of the listed risk phrases refer to Section 16.

#### 4. FIRST AID MEASURES

4.1 Description of first aid measures

General information

Immediately remove any clothing soiled by the product.

In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation

In case of unconsciousness place patient stably in side position for transportation. Supply fresh air; consult doctor in case of complaints.

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

Asthma attacks

Allergic reactions

Gastric or intestinal disorders

Headache

Dizziness



Hazards Danger of circulatory collapse. Danger of convulsion. Danger of disturbed cardiac rhythm.

4.3 Indication of any immediate medical attention and special treatment needed If swallowed, gastric irrigation with added, activated carbon.

Monitor circulation, possible shock treatment.

Medical supervision for at least 48 hours.

If necessary oxygen respiration treatment.

Treat skin and mucous membrane with antihistamine and corticoid preparations.

## 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 Formation of toxic gases is possible during heating or in case of fire.

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.
Wear protective equipment. Keep unprotected persons away.
Avoid formation of dust.
Ensure adequate ventilation

6.2 Environmental precautions

Do not allow to enter sewers/ surface or ground water. Suppress gases/fumes/haze with water haze or fog.

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

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of dust.

Any unavoidable deposit of dust must be regularly removed.

Keep away from heat and direct sunlight.

Dust can combine with air to form an explosive mixture.

Information about fire - and explosion protection: No special measures required.

7.2 Conditions for safe storage, including any incompatibilities Storage

Requirements to be met by storerooms and receptacles

Store in a cool location.

Protect from humidity and water.

Due to photo-sensitivity, store product in brown-glass or stainless-steel receptacles.

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

Provide ventilation for receptacles.

Information about storage in one common storage facility

Store away from foodstuffs.

Do not store together with oxidizing and acidic materials.

Store away from water.

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.

Protect from heat and direct sunlight.

Protect from humidity and water.

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: 95-53-4 o-toluidine

PEL (USA)	22 mg/m³, 5 ppm
	Skin
REL (USA)	Skin; See Pocket Guide App. A
TLV (USA)	8,8 mg/m <sup>3</sup> , 2 ppm
	Skin; BEI-M
EL (Canada)	2 ppm
	Skin; IARC 1
EV (Canada)	9 mg/m³, 2 ppm
	Skin

DNELs: No further relevant information available.

PNECs: No further relevant information available.

Ingredients with biological limit values: 95-53-4 o-toluidine



BEI (USA)	1,5 % of hemoglobin Medium: blood
	Time: during or end of shift
	Parameter: Methemoglobin (background, nonspecific, semi-quantitative)

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.

Store protective clothing separately.

Respiratory protection



Combined Organic Vapor and Particulate Respirator is recommended for use during all processing activities.

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

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. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

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: Impervious protective 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	Change in Condition	
Form: Powder	Melt Point/Range: Undetermined	
Color: Light Gray	Boiling point/Range: Undetermined	
Odor: Odorless	Odor threshold: Not determined	
pH: Not applicable	Flash point: Not applicable	
Vapor Pressure: Not applicable	Flammability (solid, gaseous): Not determined	
Density at 20 °C: 1.1 g/cm <sup>3</sup>	Ignition temperature: Not determined	
Relative density: Not determined.	Decomposition temperature: Not determined	
Vapor Density (Air = 1): Not applicable	Self-igniting: Product is not self-igniting.	
Evaporation rate: Not applicable.	Danger of explosion: Product does not present an	
	explosion hazard.	
Solubility in / Miscibility with water: Insoluble.		
Viscosity	Explosion limits	
Dynamic: Not applicable.	Lower: Not determined.	
Kinematic: Not applicable.	Upper: 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. Moist conditions

10.3 Possibility of hazardous reactions

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

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

Reacts with acids, alkalis and oxidizing agents. Contact with acids releases toxic gases. Photoreactive.

10.4 Conditions to avoid Store away from oxidizing agents. Moisture. Keep away from heat and direct sunlight.

10.5 Incompatible materials: Contact with acids liberates toxic gases.

10.6 Hazardous decomposition products Nitrogen oxides



Carbon monoxide and carbon dioxide Danger of forming toxic pyrolysis products.

#### 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity

LD/LC50 values relevant for classification:		
97-39-2 1,3-di-o-tolylguanidine		
Oral	LD50	500 mg/kg (rat)
95-53-4 o-toluidine		
Oral	LD50	670 mg/kg (rat)
Dermal	LD50 3250 mg/kg (rabbit)	

Primary irritant effect

on the skin: No irritant effect.

on the eye: No irritant effect.

Sensitization: No sensitizing effects known.

Additional toxicological information

The product shows the following dangers according to the calculation method of the General EU Classification

Guidelines for Preparations as issued in the latest version:

Toxic

Carcinogenic.

The product can cause deformations.

Carcinogenic if inhaled.

Sensitization: Sensitization possible by inhalation and/or dermal contact.

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

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity: The product contains materials that are harmful to the environment.

12.2 Persistence and degradability: The product is not easily, but potentially biodegradable.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information

General notes

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

The product may not be released into the environment without control.

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

Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water.

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground



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

After prior treatment product has to be disposed of in an incinerator for hazardous waste adhering to the regulations pertaining to the disposal of particularly hazardous waste.

Uncleaned packaging

Recommendation: • Disposal must be made according to official regulations.

## 14. TRANSPORTATION INFORMATION

14.1 UN-Number DOT, ADR, IMDG, IATA	UN2811
14.2 UN proper shipping name DOT, IATA ADR IMDG DOT	TOXIC SOLID, ORGANIC, N.O.S. (1,3-di-o-tolylguanidine), 2811, TOXIC SOLID, ORGANIC, N.O.S. (1,3-di-o-tolylguanidine) TOXIC SOLID, ORGANIC, N.O.S
ADR	Class: 6.1 Toxic substances. Label: 6.1
IMDG, IATA	Class: 6.1 (T2) Toxic substances. Label: 6.1
6	Class: 6.1 Toxic substances. Label: 6.1
14.4 Packing group DOT, ADR, IMDG, IATA	III
14.5 Environmental hazards Marine pollutant Special Marking (ADR)	No Symbol (fish and tree)
14.6 Special precautions for user	Warning: Toxic substances.



14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: UN "Model Regulation"

Not applicable. UN2811, TOXIC SOLID, ORGANIC, N.O.S., ENVIRONMENTALLY HAZARDOUS, 6.1, 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)	None of the ingredients is listed.
SARA Section 313 (Specific toxic chemical listings)	95-53-4 o-toluidine.
TSCA (Toxic Substances Control Act)	All ingredients are listed
Proposition 65 (California)	
Chemicals known to cause cancer	95-53-4 o-toluidine.
Chemicals known to cause reproductive toxicity for females	None of the ingredients is listed.
Chemicals known to cause reproductive toxicity for males	None of the ingredients is listed.
Chemicals known to cause developmental toxicity	None of the ingredients is listed.
Carcinogenic Categories	
EPA (Environmental Protection Agency)	None of the ingredients is listed.
IARC (International Agency for Research on Cancer)	95-53-4 o-toluidine. 1
TLV (Threshold Limit Value established by ACGIH)	95-53-4 o-toluidine. A3
NIOSH-Ca (National Institute for Occupational Safety and Health)	95-53-4 o-toluidine.
OSHA-Ca (Occupational Safety & Health Administration)	None of the ingredients is listed.
Canada	
Canadian Domestic Substances List (DSL)	All ingredients are listed.
Canadian Ingredient Disclosure list (limit 0.1%)	95-53-4 o-toluidine.
Canadian Ingredient Disclosure list (limit 1%)	None of the ingredients is listed.

National regulations

Information about limitation of use

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

Other regulations, limitations and prohibitive regulations

Substances of very high concern (SVHC) according to REACH, Article 57

95-53-4 o-toluidine

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.

Relevant phrases

H301 Toxic if swallowed.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H350 May cause cancer.H400 Very toxic to aquatic life.

R22 Harmful if swallowed.

R23/25 Toxic by inhalation and if swallowed.

R36 Irritating to eyes.

R45 May cause cancer.

R50 Very toxic to aquatic organisms.

R65 Harmful: may cause lung damage if swallowed.

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent