

# SAFETY DATA SHEET

Spock 0.2G

SDS # : 7559-A

Revision date: 2016-06-01

Version 2.02



## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** Spock 0.2G  
**Active Ingredient(s)** Bifenthrin  
**Formula** 7559

### Manufacturer/Supplier

FMC (Suzhou) Crop Care Co. Ltd  
99 Jiepu Road, Shengpu, Suzhou Industrial  
Park, Jiang Su, PRC 215126  
Emergency Telephone Numbers:  
(86)-(0512)-(62863988)  
Fax: (86)-(0512)-(62863900)

### Emergency telephone number

For leak, fire, spill, or accident emergencies, call:  
1 800 / 424-9300 (CHEMTREC - U.S.A. & Canada)  
1 703 / 527 3887 (CHEMTREC - All Other Countries - Collect)

Medical Emergencies:  
1 800 / 331-3148 (PROSAR - U.S.A. & Canada)  
1 651 / 632-6793 (PROSAR - All Other Countries - Collect)  
8621 - 62781057 (FMC - Shanghai) Responsible/issuing person

Official National Emergency Telephone  
Number or Poison Control Center Number

## 2. HAZARDS IDENTIFICATION

### Classification of the chemical

Carcinogenicity	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

### Labeling

Symbol(s)



Signal word:

**WARNING**

### **Hazard Statements**

H351 - Suspected of causing cancer  
H410 - Very toxic to aquatic life with long lasting effects

### **Precautionary statements**

P312 - Call a POISON CENTER or doctor/ physician if you feel unwell  
P501 - Dispose of contents/ container to an approved incineration plant  
P273 - Avoid release to the environment  
P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/ attention

P405 - Store locked up

P501 - Dispose of contents/ container to an approved incineration plant

**Hazards not otherwise classified  
(HNOC)**

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	Weight %	ENCS (Japan)	ISHL No	CAS-No
Synthetic amorphous silica	<1	X		112926-00-8
Iron Oxide	0.09913	X		1309-37-1
Aluminum Oxide	<3	X		1344-28-1
Titanium dioxide	0.09913	X		13463-67-7
Crystalline silica, quartz	>90	X		14808-60-7
White mineral oil	<1			8042-47-5
Bifenthrin	0.22	X		82657-04-3

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for further treatment advice.
<b>Skin Contact</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.
<b>Inhalation</b>	Move to fresh air. If person is not breathing, contact emergency medical services, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
<b>Ingestion</b>	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
<b>Indication of immediate medical attention and special treatment needed, if necessary</b>	This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

### 5. FIRE-FIGHTING MEASURES

<b>Flammable properties</b>	Moderately combustible. The product may form flammable mixtures with air when heated above the flash point.
<b>Suitable Extinguishing Media</b>	Use CO <sub>2</sub> , dry chemical, or foam Soft stream or water fog only if necessary
<b>Protective equipment and precautions for firefighters</b>	Isolate fire area. Evacuate downwind. Do not breathe smoke, vapors or gases generated. Wear self-contained breathing apparatus and protective suit.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

**Methods for cleaning up**

Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

**Other**

For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

**7. HANDLING AND STORAGE****Handling**

Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

**Storage**

Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Keep/store only in original container.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

Chemical name	Japan	ACGIH TLV	China	Korea
Synthetic amorphous silica 112926-00-8			TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Iron Oxide 1309-37-1		TWA: 5 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>
Aluminum Oxide 1344-28-1	OEL: 2 mg/m <sup>3</sup> OEL: 0.5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup>	TWA: 4 mg/m <sup>3</sup> STEL: 8 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Titanium dioxide 13463-67-7	OEL: 0.3 mg/m <sup>3</sup> C2B	TWA: 10 mg/m <sup>3</sup>	TWA: 8 mg/m <sup>3</sup> STEL: 16 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
Crystalline silica, quartz 14808-60-7		TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.7 mg/m <sup>3</sup> TWA: 0.3 mg/m <sup>3</sup> TWA: 1 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup> TWA: 0.2 mg/m <sup>3</sup> STEL: 2 mg/m <sup>3</sup> STEL: 1.4 mg/m <sup>3</sup> STEL: 1 mg/m <sup>3</sup> STEL: 0.6 mg/m <sup>3</sup> STEL: 0.4 mg/m <sup>3</sup> C1	TWA: 0.05 mg/m <sup>3</sup>
Chemical name	Taiwan	Indonesia	Australia	India
Synthetic amorphous silica 112926-00-8		TWA 10 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>	
Iron Oxide 1309-37-1	STEL 15 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup> C(A4)	TWA 5 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	TWA 5 mg/m <sup>3</sup>
Aluminum Oxide 1344-28-1		TWA 10 mg/m <sup>3</sup> C(A4)	TWA 10 mg/m <sup>3</sup>	
Titanium dioxide 13463-67-7	STEL 15 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup> C(A4)	TWA 10 mg/m <sup>3</sup>	
Crystalline silica, quartz 14808-60-7		TWA 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	

**Occupational exposure controls****Engineering measures**

Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

**Personal protective equipment****General information**

If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the

For dust, splash, mist or spray exposures wear a filtering facepiece respirator (N95, or R95, or P95) which

For dust, splash, mist or spray exposure, wear chemical protective

Wear long-sleeved shirt, longneopre pants, ne or washing in case of other eye or skin suitabl contamination.

product as supplied.

**Respiratory Protection**

is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization).

**Eye/Face**

**Protection**

goggles. **Skin**

**and Body**

**Protection**

chemical-e

resistant

gloves

and

headgear.

**Hand**

**Protection**

n

Wash skin prior to

chemical-e

ceating, drinking,

chewing gum or

resista using tobacco.

Shower or bathe at

the end of

gloves. Remove

working. Remove

observ and wash

e the contaminated

instruc clothing before

tions re-use. Launder

regardiwork clothing

ng separately from

perme regular household

ability laundry.

and

breakt

hrough

time

which

are

provid

ed by

the

supplie

r of the

gloves.

Also

take

into

consid

eration

the

specifi

c local

conditi

ons

under

which

the

produc

t is

used,

such

as the

danger

of

cuts,

abrasio

n and

the

contact

time.

If used

in

solutio

n, or

mixed

with

other

substa

nces,

and

under

conditi  
ons  
which  
differ  
from  
EN  
374,  
contact  
the  
supplie  
r of the  
EC  
approv  
ed  
gloves  
**Hygie  
ne  
measu  
res**

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light yellow To White
Odor	No information available
Physical State	Solid
pH	5-7
Flash point	Not determined
Autoignition temperature	No data available
Boiling Point/Range	No data available
Melting Point/Range	No data available
Flammability Limits in Air	
Upper flammability limit:	No data available
Lower flammability limit:	No data available
Explosion limits	
Upper	No data available
Lower	No data available
Explosive properties	No information available
Oxidizing properties	No information available
Evaporation Rate	No data available
Vapor density	No data available
solubility	No information available
Water solubility	<0.1 ppb
Partition coefficient	No data available
Viscosity, dynamic	No information available

## 10. STABILITY AND REACTIVITY

Stability	Stable.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to Avoid	Excessive heat. Heat, flames and sparks.
Hazardous Decomposition Products	Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ).

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Product Information.

Skin Contact	Non-irritating
Eye Contact	Non-irritating

LD50 Dermal > 2002 mg/kg (rabbit)  
LD50 Oral > 5,000 mg/kg (rat)

**Chronic toxicity**

**Chronic toxicity** Long-term exposure caused neurotoxicity (tremors and impaired gait) in the early exposure in animal studies, but tremors disappeared with continued exposure

**Target organ effects** Central Nervous System (CNS).

**Carcinogenicity** Bifenthrin: Weak treatment-related response for liver adenocarcinomas and benign bladder tumors (lesion) in male mice. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

**Mutagenicity** Not genotoxic in animal studies

**Reproductive toxicity** No toxicity to reproduction in animal studies

**Developmental toxicity** Not teratogenic in animal studies.

Chemical name	IARC
Crystalline silica, quartz	Group 1

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Bifenthrin (82657-04-3)				
Active Ingredient(s)	Duration	Species	Value	Units
Bifenthrin	96 h LC50	Fish	0.1	µg/L
	72 h EC50	Algae	0.822	mg/L
	48 h EC50	Crustacea	0.11	µg/L
	21 d NOEC	Fish	0.012	µg/L
	21 d NOEC	Crustacea	0.0013	µg/L

**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

Chemical name	Partition coefficient
White mineral oil 8042-47-5	>6

**Other Adverse Effects** No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods** Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

**Contaminated Packaging** Dispose of in accordance with local regulations.

**14. TRANSPORT INFORMATION**

**DOT** This material is not a hazardous material as defined by U.S. Department of Transportation at 49 CFR Parts 100 through 185.

**TDG** Classification below is only applicable when shipped by vessel and is not applicable when shipped by road or rail only.

**UN/ID no** UN3077

<b>Proper Shipping Name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Bifenthrin.
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Bifenthrin), 9, PG III, Marine Pollutant

**IMDG/IMO**

<b>UN/ID no</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Bifenthrin
<b>EmS No.</b>	F-A, S-F
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Bifenthrin), 9, PG III, Marine Pollutant

**ICAO/IATA**

<b>UN/ID no</b>	UN3077
<b>Proper Shipping Name</b>	Environmentally hazardous substance, solid, n.o.s.
<b>Hazard class</b>	9
<b>Packing Group</b>	III
<b>Marine Pollutant</b>	Bifenthrin
<b>Description</b>	UN3077, Environmentally hazardous substance, solid, n.o.s. (Bifenthrin), 9, PG III, Marine Pollutant

**15. REGULATORY INFORMATION****International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELI NCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines )	AICS (Australia)	NZIoC (New Zealand)
Synthetic amorphous silica 112926-00-8	-	X	-	X	X	X	X	X	X
Iron Oxide 1309-37-1	X	X	X	X	X	X	X	X	X
Aluminum Oxide 1344-28-1	X	X	X	X	X	X	X	X	X
Titanium dioxide 13463-67-7	X	X	X	X	X	X	X	X	X
Crystalline silica, quartz 14808-60-7	X	X	X	X	X	X	X	X	X
White mineral oil 8042-47-5	X	X	X	-	X	X	X	X	X
Bifenthrin 82657-04-3	-	-	-	X	X	X	-	-	X

ENCS - Japan Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

**Japan**

Chemical name	Dangerous Substances	organic solvents	Harmful Substances Whose Names Are to be Indicated on the Label	Pollution Release and Transfer Registry (Class II):	Pollution Release and Transfer Registry (Class I):	Poisonous and Deleterious Substances Control Law
Synthetic amorphous silica	>=0.1 %	Not applicable	X			
Iron Oxide	>=1 %	Not applicable	X			
Aluminum Oxide	>=1 %	Not applicable	X			

Titanium dioxide	>=0.1 %	Not applicable	X			
Crystalline silica, quartz	>=0.1 %	Not applicable	X			
White mineral oil	>=0.1 %	Not applicable	X			
Bifenthrin	Not applicable	Not applicable	Not applicable	>=1		Deleterious -X
Chemical name	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Harmful Substances Requiring Permission	ISHA - Toxic Chemicals Control Law	Toxic Release Inventory Chemicals - Group 1	Toxic Release Inventory Chemicals - Group 2	
Aluminum Oxide	Not applicable	Not applicable	Not applicable	Not applicable		>=1.0 %

## 16. OTHER INFORMATION

Revision date: 2016-06-01  
Reason for revision: No information available.

### Disclaimer

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

### Prepared By:

FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2016 FMC Corporation. All Rights Reserved.

**End of Safety Data Sheet**