



Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

**SECTION 1. IDENTIFICATION** 

Product identifier

Product name TALSTAR® PL GRANULAR INSECTICIDE

Other means of identification

Product code 50000375

Recommended use of the chemical and restrictions on use

**Recommended use** Can be used as insecticide only.

**Restrictions on use**Use as recommended by the label.

Details of the supplier of the safety data sheet

<u>Manufacturer</u> FMC Corporation

2929 WALNUT ST

PHILADELPHIA PA 19104

USA

(215) 299-6000 SDS-Info@fmc.com

**Emergency telephone** 

For leak, fire, spill or accident emergencies, call:

1 800 / 424-9300 (CHEMTREC - U.S.A.) 1 703 / 741-5970 (CHEMTREC - International) 1 703 / 527-3887 (CHEMTREC - Alternate)

Medical emergency:

U.S.A. & Canada: +1 800 / 331-3148

All other countries: +1 651 / 632-6793 (Collect)

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity : Category 1

- single exposure

Specific target organ toxicity : Category 1

- repeated exposure

**GHS** label elements

Hazard pictograms :

Signal Word : Danger





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

Hazard Statements : H370 Causes damage to organs.

H372 Causes damage to organs through prolonged or repeated

exposure.

Precautionary Statements : Prevention:

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

P307 + P311 IF exposed: Call a POISON CENTER or doctor/

physician.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.

#### Other hazards

Very toxic to aquatic life with long lasting effects.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

# Components

Chemical name	CAS-No.	Concentration (% w/w)
Quartz (SiO2)	14808-60-7	>= 90 - <= 100
Bifenthrin	82657-04-3	0.2

#### **SECTION 4. FIRST AID MEASURES**

General advice : Do not leave the victim unattended.

Show this safety data sheet to the doctor in attendance.

Move out of dangerous area.

If inhaled : If symptoms persist, call a physician.

If unconscious, place in recovery position and seek medical

advice.

In case of skin contact : If on clothes, remove clothes.

If on skin, rinse well with water.

If skin irritation persists, call a physician.

In case of eye contact : If eye irritation persists, consult a specialist.





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

Keep eye wide open while rinsing.

Protect unharmed eye. Remove contact lenses.

Flush eyes with water as a precaution.

If swallowed : Take victim immediately to hospital.

If symptoms persist, call a physician.

Never give anything by mouth to an unconscious person.

Do not give milk or alcoholic beverages.

Keep respiratory tract clear.

Most important symptoms and effects, both acute and

delayed

Causes damage to organs through prolonged or repeated

exposure.

Causes damage to organs.

Notes to physician : It may be helpful to show this safety data sheet to physician.

Treat symptomatically.

### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media : Dry chemical

Foam

Carbon dioxide (CO2)

Unsuitable extinguishing

media

High volume water jet

Specific hazards during fire

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod: :

ucts

Thermal decomposition can lead to release of toxic and irritat-

ing vapors.

Further information : Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Special protective equipment

for fire-fighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emer-

gency procedures

Avoid breathing dust. Avoid dust formation.

Use personal protective equipment.

Environmental precautions : If the product contaminates rivers and lakes or drains inform

respective authorities.

Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains.

Methods and materials for

containment and cleaning up

Keep in suitable, closed containers for disposal.





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

**SECTION 7. HANDLING AND STORAGE** 

Advice on protection against :

fire and explosion

: Provide appropriate exhaust ventilation at places where dust

is formed.

Advice on safe handling : Dispose of rinse water in accordance with local and national

regulations.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

For personal protection see section 8. Avoid contact with skin and eyes. Do not breathe vapors/dust.

Avoid formation of respirable particles.

Conditions for safe storage : Electrical installations / working materials must comply with

the technological safety standards.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Keep container tightly closed in a dry and well-ventilated

place.

Further information on stor-

age stability

No decomposition if stored and applied as directed.

#### **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Quartz (SiO2)	14808-60-7	TWA (Respirable dust)	0.05 mg/m3	OSHA Z-1
		TWA (respirable)	10 mg/m3 / %SiO2+2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO2+5	OSHA Z-3
		PEL (respir- able)	0.05 mg/m3	OSHA CARC
kaolin	1332-58-7 TWA (Respirable particulate matter)	pirable par- ticulate mat-	2 mg/m3	ACGIH
		TWA (Respirable)	5 mg/m3	NIOSH REL
		TWA (total)	10 mg/m3	NIOSH REL
		TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA (respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (Total	10 mg/m3	OSHA P0





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

dust)

TWA (respir- 5 mg/m3 OSHA P0 able dust fraction)

Personal protective equipment

Respiratory protection : In case of dust exposure wear suitable personal respiratory

protection and protective suit.

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate,

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Eye protection : Tightly fitting safety goggles

Eye wash bottle with pure water

Skin and body protection : Choose body protection according to the amount and con-

centration of the dangerous substance at the work place.

Dust impervious protective suit

Hygiene measures : Wash hands before breaks and at the end of workday.

When using do not smoke. When using do not eat or drink.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : granules

Color : light tan

Odor : musty

Odor Threshold : No data available

pH : 6.8 - 7.1

Melting point/freezing point : No data available

Boiling point/boiling range : Not applicable

Flash point : No data available

Self-ignition : No data available

Upper explosion limit / Upper : No data available





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

flammability limit

Lower explosion limit / Lower

flammability limit

: No data available

Vapor pressure : No data available

Relative vapor density : No data available

Density : 1.39 lb/scf

Bulk density : 50 - 53 lb/scf

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : Non-oxidizing

## **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reac-

tions

No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : Strong oxidizing agents

Strong acids and strong bases

Hazardous decomposition

products

Carbon oxides





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

Not classified based on available information.

Product:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: > 200 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

**Product:** 

Result : No skin irritation

### Serious eye damage/eye irritation

Not classified based on available information.

**Product:** 

Result : No eye irritation

## Respiratory or skin sensitization

### Skin sensitization

Not classified based on available information.

## Respiratory sensitization

Not classified based on available information.

**Product:** 

Result : Not a skin sensitizer.

#### Germ cell mutagenicity

Not classified based on available information.

### **Components:**

Quartz (SiO2):

Genotoxicity in vitro : Test Type: reverse mutation assay

Result: negative

Remarks: Based on data from similar materials

Genotoxicity in vivo : Test Type: Micronucleus test





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

Species: Rat

Method: OECD Test Guideline 474

Result: negative

Remarks: Based on data from similar materials

Bifenthrin:

Genotoxicity in vitro : Test Type: gene mutation test

Test system: Chinese hamster ovary cells

Metabolic activation: with and without metabolic activation

Result: negative

Test Type: reverse mutation assay

Metabolic activation: with and without metabolic activation

Result: negative

Test Type: Mouse lymphoma assay

Metabolic activation: with and without metabolic activation

Result: negative

Genotoxicity in vivo : Test Type: Sex-linked Recessive Lethal Test

Species: Drosophila melanogaster (vinegar fly)

Result: negative

Test Type: unscheduled DNA synthesis assay

Species: Rat

Method: OECD Test Guideline 486

Result: negative

#### Carcinogenicity

Not classified based on available information.

**Product:** 

Carcinogenicity - Assess-

ment

Positive evidence from human epidemiological studies

Weight of evidence does not support classification as a carcinogen, This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to

occur from exposure to this product.

IARC Group 1: Carcinogenic to humans

kaolin 1332-58-7

(Silica dust, crystalline)

OSHA specifically regulated carcinogen

Quartz (SiO2) 14808-60-7

(crystalline silica)

NTP Known to be human carcinogen

kaolin 1332-58-7

(Silica, Crystalline (Respirable Size))





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

#### Reproductive toxicity

Not classified based on available information.

#### Components:

#### Bifenthrin:

Effects on fertility : Test Type: Two-generation study

Species: Rat

Application Route: Oral

General Toxicity Parent: NOAEL: 3 mg/kg bw/day General Toxicity F1: NOAEL: 5 mg/kg bw/day

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rabbit Application Route: Oral

General Toxicity Maternal: NOAEL: 2.7 mg/kg bw/day

Teratogenicity: NOAEL: 2.7 mg/kg bw/day

Symptoms: Maternal effects. Result: No teratogenic effects.

Test Type: Embryo-fetal development

Species: Rat

Application Route: Oral

General Toxicity Maternal: NOAEL: 1 mg/kg bw/day

Teratogenicity: NOAEL: 2 mg/kg bw/day

Result: No teratogenic effects.

# STOT-single exposure

Causes damage to organs.

**Product:** 

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 1.

#### STOT-repeated exposure

Causes damage to organs through prolonged or repeated exposure.

**Product:** 

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 1.

# Repeated dose toxicity

## **Components:**

## Quartz (SiO2):

Species : Rat

LOAEC : 0.0025 mg/l
Application Route : Inhalation
Exposure time : 90 day



# TALSTAR® PL GRANULAR INSECTICIDE

Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

Method : OECD Test Guideline 413

Target Organs : Lungs

Remarks : Based on data from similar materials

Bifenthrin:

Species : Rat, male and female

NOEL : 100 ppm Application Route : Oral - feed Exposure time : 90 d

Remarks : No toxicologically significant effects were found.

Species : Dog, male and female NOEL : 2.5 mg/kg bw/day

Application Route : Oral - feed Exposure time : 13 w Symptoms : Tremors

### **Aspiration toxicity**

Not classified based on available information.

### Components:

### Bifenthrin:

The substance does not have properties associated with aspiration hazard potential.

## **Further information**

**Product:** 

Remarks : No data available

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

# **Components:**

Quartz (SiO2):

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 10,000 mg/l

Exposure time: 72 h

Bifenthrin:

Toxicity to fish : LC50 (Salmo gairdneri): 0.15 μg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.11 μg/l

Exposure time: 48 h

Toxicity to algae/aquatic : EC50 (algae): 0.822 mg/l





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

plants Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC (Oncorhynchus mykiss (rainbow trout)): 0.00012 mg/l

Exposure time: 21 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 0.0013 µg/l

Exposure time: 21 d

NOEC (Daphnia magna (Water flea)): 0.00095 µg/l

Exposure time: 21 d

Toxicity to soil dwelling or-

ganisms

LD50 (Eisenia fetida (earthworms)): > 16 mg/kg

Exposure time: 14 d

Toxicity to terrestrial organ-

isms

LD50 (Colinus virginianus (Bobwhite quail)): 1,800 mg/kg

LD50 (Apis mellifera (bees)): 0.044 - 0.11 µg/bee

End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): 0.1 µg/bee

End point: Acute oral toxicity

LD50 (Anas platyrhynchos (Mallard duck)): > 2,150 mg/kg

# Persistence and degradability

**Components:** 

Quartz (SiO2):

Biodegradability : Result: Not biodegradable

Bifenthrin:

Biodegradability : Result: Not readily biodegradable.

**Bioaccumulative potential** 

**Components:** 

Quartz (SiO2):

Bioaccumulation : Remarks: Does not bioaccumulate.

Bifenthrin:

Bioaccumulation : Species: Lepomis macrochirus (Bluegill sunfish)

Bioconcentration factor (BCF): 1,709

Remarks: Due to the distribution coefficient n-octanol/water,

accumulation in organisms is possible.

See section 9 for octanol-water partition coefficient.

Partition coefficient: n-

octanol/water

log Pow: 6





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

Mobility in soil

**Components:** 

Bifenthrin:

Distribution among environ-

mental compartments

Koc: 236610 ml/g, log Koc: 5.37

Remarks: immobile

Stability in soil

Other adverse effects

**Product:** 

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-

tection of Stratospheric Ozone - CAA Section 602 Class I

Substances

Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological infor-

mation

Very toxic to aquatic life with long lasting effects.

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

**SECTION 13. DISPOSAL CONSIDERATIONS** 

**Disposal methods** 

Waste from residues : Send to a licensed waste management company.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

The product should not be allowed to enter drains, water

courses or the soil.

Contaminated packaging : Do not re-use empty containers.

Dispose of as unused product. Empty remaining contents.

**SECTION 14. TRANSPORT INFORMATION** 

International Regulations

UNRTDG

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S. (Bifenthrin)

Class : 9

Subsidiary risk : ENVIRONM.

Packing group : III

Labels : 9 (ENVIRONM.)

IATA-DGR



# TALSTAR® PL GRANULAR INSECTICIDE

Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

UN/ID No. : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(Bifenthrin)

956

Class : 9 Packing group : III

Labels : Miscellaneous

Packing instruction (cargo

aircraft)

Packing instruction (passen- : 956

ger aircraft)

Environmentally hazardous : yes

**IMDG-Code** 

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.

(Bifenthrin)

Class : 9
Packing group : III
Labels : 9
EmS Code : F-A, S-F
Marine pollutant : yes

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

Not applicable for product as supplied.

# **Domestic regulation**

**49 CFR** 

UN/ID/NA number : UN 3077

Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(Bifenthrin)

Class : 9 Packing group : III

Labels : CLASS 9 ERG Code : 171

Marine pollutant : yes (Bifenthrin)

Remarks : Shipment by ground under DOT is non-regulated; however it

may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

Special precautions for user

Remarks : Shipment by ground under DOT is non-regulated; however it

may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO.

49CFR: no dangerous good in non-bulk packaging

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

# TALSTAR® PL GRANULAR INSECTICIDE



Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

#### **SECTION 15. REGULATORY INFORMATION**

### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Specific target organ toxicity (single or repeated exposure)

Carcinogenicity

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

#### **US State Regulations**

# Massachusetts Right To Know

Quartz (SiO2) 14808-60-7 Distillates (petroleum), solvent-dewaxed light paraffinic 64742-56-9

# Pennsylvania Right To Know

Quartz (SiO2) 14808-60-7

#### **Maine Chemicals of High Concern**

Product does not contain any listed chemicals

#### **Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

#### **Washington Chemicals of High Concern**

Product does not contain any listed chemicals





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

#### California Prop. 65

WARNING: This product can expose you to chemicals including kaolin, titanium dioxide, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

### **California Permissible Exposure Limits for Chemical Contaminants**

Quartz (SiO2) 14808-60-7

**California Regulated Carcinogens** 

kaolin 1332-58-7

The ingredients of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not

on the Canadian DSL nor NDSL.

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : Not in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

### **TSCA list**

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

#### **SECTION 16. OTHER INFORMATION**

#### **Further information**

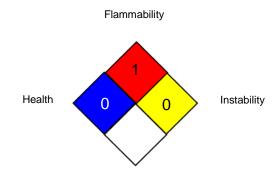
# TALSTAR® PL GRANULAR INSECTICIDE



Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

#### NFPA 704:



Special hazard

**0** No health threat, **1** Slightly Hazardous, **2** Hazardous, **3** Extreme danger, **4** Deadly

#### HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

#### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA CARC : OSHA Specifically Regulated Chemicals/Carcinogens

OSHA P0 : USA. Table Z-1-A Limits for Air Contaminants (1989 vacated

values)

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Min-

eral Dusts

ACGIH / TWA : 8-hour, time-weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

OSHA CARC / PEL : Permissible exposure limit (PEL)
OSHA P0 / TWA : 8-hour time weighted average
OSHA Z-1 / TWA : 8-hour time weighted average
OSHA Z-3 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI -





Version Revision Date: SDS Number: Date of last issue: -

1.1 02/13/2023 50000375 Date of first issue: 10/31/2022

Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ -Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### **Disclaimer**

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to insure that this document is the most current available from FMC Corporation. 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. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. 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.

US / EN

# Prepared by:

**FMC** Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

© 2021-2023 FMC Corporation. All Rights Reserved.

**End of Material Safety Data Sheet**