according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version 1.2

Revision Date: 03/03/2025

SDS Number: 50000126

Date of last issue: 02/01/2018 Date of first issue: 02/01/2018

SECTION 1. IDENTIFICATION

Product identifier

Product name T-PAC XP™ herbicide

Other means of identification

Product code 50000126

Recommended use of the chemical and restrictions on use

Recommended use

Can be used as herbicide only.

Restrictions on useUse as recommended by the label.

Manufacturer or supplier's details

<u>Manufacturer</u> FMC Corporation

2929 WALNUT ST

PHILADELPHIA PA 19104

USA

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

<u>Supplier Address</u> FMC Corporation

2929 Walnut Street Philadelphia PA 19104

USA

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 2 (Thyroid, Nervous system)

- repeated exposure

GHS label elements

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018
1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Hazard pictograms

Signal Word : WARNING

Hazard Statements : H373 May cause damage to organs (Thyroid, Nervous system)

through prolonged or repeated exposure.

Precautionary Statements : Prevention:

P260 Do not breathe dust.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

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

attention.

Disposal:

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

posal plant.

Other hazards

Very toxic to aquatic life.

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)
thifensulfuron-methyl (ISO)	79277-27-3	37.5
tribenuron-methyl (ISO)	101200-48-0	37.5
kaolin	1332-58-7	>= 10 - < 20
Residues, petroleum, catalytic re-	68425-94-5	>= 1 - < 5
former fractionator, sulfonated, poly-		
mers with formaldehyde, sodium salts		
Lignosulfonic acid, ethoxylated, sodi-	68611-14-3	>= 1 - < 5
um salts		

SECTION 4. FIRST AID MEASURES

General advice : Move out of dangerous area.

Show this material safety data sheet to the doctor in attend-

ance.

Do not leave the victim unattended.

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

If unconscious, place in recovery position and seek medical

advice.

If experiencing any discomfort, immediately remove from exposure. Get medical attention if discomfort does not disap-

pear.

In case of skin contact : Take off all contaminated clothing immediately.

Wash contaminated clothing before re-use.

Wash off immediately with plenty of water for at least 15

minutes.

Get medical attention if irritation develops and persists.

In case of eye contact : Flush eyes with water as a precaution.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Do not induce vomiting without medical advice.

Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

If symptoms persist, call a physician.

Most important symptoms and effects, both acute and

delayed

May cause damage to organs through prolonged or repeated

exposure.

Notes to physician : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Dry chemical, CO2, water spray or regular foam.

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

Unsuitable extinguishing

media

High volume water jet

Do not spread spilled material with high-pressure water

streams.

Specific hazards during fire

fighting

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

courses.

Hazardous combustion prod-

ucts

Nitrogen oxides (NOx)

Sulfur oxides

Carbon oxides

Fire may produce irritating, corrosive and/or toxic gases.

Hydrogen cyanide

Further information : Collect contaminated fire extinguishing water separately. This

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment:

for fire-fighters

Firefighters should wear protective clothing and self-contained

breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

Ensure adequate ventilation.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

For disposal considerations see section 13.

Environmental precautions

Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

Methods and materials for containment and cleaning up

Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

Avoid dust formation.

Provide appropriate exhaust ventilation at places where dust

is formed.

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapors/dust.

For personal protection see section 8.

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

plication area.

Provide sufficient air exchange and/or exhaust in work rooms. Dispose of rinse water in accordance with local and national

regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated

place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage.

Electrical installations / working materials must comply with

the technological safety standards.

Further information on stor- : No decomposition if stored and applied as directed.

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

age stability

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
kaolin	1332-58-7	TWA (Respirable particulate matter)	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 dust)	10 mg/m3	OSHA P0
		TWA (respirable dust fraction)	5 mg/m3	OSHA P0

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally re-

quired.

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 : Eye wash bottle with pure water

Tightly fitting safety goggles

Skin and body protection : Dust impervious protective suit

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Protective measures : Plan first aid action before beginning work with this product.

Always have on hand a first-aid kit, together with proper in-

structions.

Ensure that eye flushing systems and safety showers are

located close to the working place. Wear suitable protective equipment.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

tions for use.

Hygiene measures : When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : solid

Form : solid, extruded granules

Color : light brown

Odor : slight

Odor Threshold : Not applicable

pH : 5.9 - 6.2 (68 °F / 20 °C)

Concentration: 10 g/l Method: CIPAC MT 75

Melting point/ range : Not available for this mixture.

Boiling point/boiling range : Not applicable

Flash point : Not applicable

Evaporation rate : Not applicable

Flammability (solid, gas) : Does not sustain combustion.

Self-ignition : Not available for this mixture.

Upper explosion limit / Upper

flammability limit

Not available for this mixture.

Lower explosion limit / Lower

flammability limit

Not available for this mixture.

Vapor pressure : Not available for this mixture.

Relative vapor density : Not available for this mixture.

Relative density : Not available for this mixture.

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Density : No data available

Bulk density : 0.69 - 0.72 g/cm3Method: CIPAC MT 169

Solubility(ies)

Water solubility : soluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : No data available

Decomposition temperature : Not available for this mixture.

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The product is not 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.

Conditions to avoid : Avoid extreme temperatures.

Avoid dust formation.

Incompatible materials : Not applicable

Avoid strong acids, bases, and oxidizers.

Hazardous decomposition

products

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Based on available data, the classification criteria are not met.

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Product:

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

Method: Expert judgment

Acute inhalation toxicity : Acute toxicity estimate (Rat): > 5.0 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Expert judgment

Acute dermal toxicity : Acute toxicity estimate (Rat): > 5,000 mg/kg

Method: Expert judgment

Components:

thifensulfuron-methyl (ISO):

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

Acute inhalation toxicity : LC50 (Rat): > 7.9 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

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

tribenuron-methyl (ISO):

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

Method: OECD Test Guideline 425

Acute inhalation toxicity : LC50 (Rat): > 5.14 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

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

Method: OECD Test Guideline 402

kaolin:

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

Method: OECD Test Guideline 401

LD50: > 2,000 mg/kg

Method: OECD Test Guideline 420

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50: 5.07 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018
1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

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

LD50: > 2,000 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

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

Lignosulfonic acid, ethoxylated, sodium salts:

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

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rabbit

Assessment : Not classified as irritant

Result : No skin irritation

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

Components:

thifensulfuron-methyl (ISO):

Species : Rabbit

Method : OECD Test Guideline 404

Result : No skin irritation

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

tribenuron-methyl (ISO):

Species : Rabbit

Assessment : Not classified as irritant
Method : OECD Test Guideline 404
Remarks : May cause mild irritation.

Based on available data, the classification criteria are not met.

kaolin:

Method : OECD Test Guideline 404

Result : No skin irritation

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

Remarks : No data available

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

Lignosulfonic acid, ethoxylated, sodium salts:

Result : Skin irritation

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Product:

Species : Rat

Result : No eye irritation

Assessment : Not classified as irritant

Remarks : Minimal effects that do not meet the threshold for classifica-

tion.

Components:

thifensulfuron-methyl (ISO):

Species : Rabbit

Result : No eye irritation

Method : OECD Test Guideline 405

tribenuron-methyl (ISO):

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405 Remarks : May cause mild irritation.

Based on available data, the classification criteria are not met.

kaolin:

Result : No eye irritation

Method : OECD Test Guideline 405

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formalde-

hyde, sodium salts:

Result : Eye irritation

Lignosulfonic acid, ethoxylated, sodium salts:

Result : Moderate eye irritation

Respiratory or skin sensitization

Skin sensitization

Based on available data, the classification criteria are not met.

Respiratory sensitization

Based on available data, the classification criteria are not met.

Product:

Species : Guinea pig

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

Result : Did not cause sensitization on laboratory animals.

Remarks : Not expected to cause skin sensitisation.

Components:

thifensulfuron-methyl (ISO):

Test Type : Maximization Test

Species : Guinea pig

Method : OECD Test Guideline 429

Result : Does not cause skin sensitization.

tribenuron-methyl (ISO):

Test Type : Maximization Test

Species : Guinea pig

Assessment : May cause sensitization by skin contact.

Method : OECD Test Guideline 406
Result : Causes skin sensitization.

kaolin:

Method : OECD Test Guideline 429

Result : Does not cause skin sensitization.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Components:

thifensulfuron-methyl (ISO):

Genotoxicity in vitro : Test system: Chinese hamster ovary cells

Method: OECD Test Guideline 476

Result: negative

Remarks: In vitro tests did not show mutagenic effects

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

tribenuron-methyl (ISO):

Germ cell mutagenicity -

Assessment

Did not show mutagenic effects in animal experiments.

kaolin:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative

Genotoxicity in vivo : Remarks: No data available

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Carcinogenicity

Based on available data, the classification criteria are not met.

Components:

thifensulfuron-methyl (ISO):

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

tribenuron-methyl (ISO):

Remarks : No significant adverse effects were reported

Carcinogenicity - Assess-

ment

Did not show carcinogenic effects in animal experiments.

IARC Group 1: Carcinogenic to humans

kaolin 1332-58-7

(Silica dust, crystalline)

OSHANo component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

NTP Known to be human carcinogen

kaolin 1332-58-7

(Silica, Crystalline (Respirable Size))

Reproductive toxicity

Based on available data, the classification criteria are not met.

Components:

thifensulfuron-methyl (ISO):

Reproductive toxicity - As-

sessment

: Did not show teratogenic effects in animal experiments.

tribenuron-methyl (ISO):

Reproductive toxicity - As-

sessment

No toxicity to reproduction

Animal testing did not show any effects on fetal development.,

Did not show teratogenic effects in animal experiments.

kaolin:

Effects on fertility : Remarks: No data available

Effects on fetal development : Remarks: No data available

STOT-single exposure

Based on available data, the classification criteria are not met.

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Components:

tribenuron-methyl (ISO):

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

kaolin:

Remarks : No significant adverse effects were reported

Lignosulfonic acid, ethoxylated, sodium salts:

Assessment : May cause respiratory irritation.

STOT-repeated exposure

May cause damage to organs (Thyroid, Nervous system) through prolonged or repeated expo-

sure.

Components:

tribenuron-methyl (ISO):

Target Organs : Thyroid, Nervous system

Assessment : May cause damage to organs through prolonged or repeated

exposure.

kaolin:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Components:

thifensulfuron-methyl (ISO):

Species : Rat

LOAEL : ca. 200 mg/kg

Exposure time : 90 d

Target Organs : No specific target organs noted

Symptoms : Reduced body weight

tribenuron-methyl (ISO):

Species : Rabbit LOAEL : 80 mg/kg

Target Organs : Thyroid, Nervous system

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

toxicant, repeated exposure, category 2.

Remarks : Increased mortality or reduced survival

kaolin:

Remarks : No data available

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Aspiration toxicity

Based on available data, the classification criteria are not met.

Components:

tribenuron-methyl (ISO):

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

Further information

Product:

Remarks : Information presented in this Section conforms to the require-

ments of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard of 2012. See Section 15 for applicable information conforming to the requirements of the Federal Insecticide Fungicide and Rodenticide Act (FIFRA), as required by the US Environmental Protection

Agency (EPA), or by state Regulatory Agencies.

Remarks : No data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

thifensulfuron-methyl (ISO):

Toxicity to fish : LC50 (Salmo gairdneri): 100 mg/l

Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): > 250 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 470 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

IC50 (green algae): 0.0159 mg/l

Exposure time: 72 h

ErC50 (Raphidocelis subcapitata (freshwater green alga)): 1.4

mg/l

Exposure time: 72 h

EC50 (Lemna minor (duckweed)): 1.3 μg/l

Toxicity to fish (Chronic tox-

icity)

NOEC (Salmo gairdneri): 250 mg/l

Exposure time: 28 d

NOEC (Oncorhynchus mykiss (rainbow trout)): 10.6 mg/l

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Exposure time: 21 d

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 100 mg/l

Exposure time: 21 d

Toxicity to soil dwelling or-

ganisms

LC50 (Eisenia fetida (earthworms)): > 2,000 mg/kg

Toxicity to terrestrial organ-

isms

LD50 (Anas platyrhynchos (Mallard duck)): > 2,510 mg/kg

LD50 (Anas platyrhynchos (Mallard duck)): > 5,620 ppm

Remarks: Dietary

LD50 (Colinus virginianus (Bobwhite quail)): > 5,620 ppm

LD50 (Apis mellifera (bees)): > 7.1 µg/bee

End point: Acute oral toxicity

LD50 (Apis mellifera (bees)): > 100 µg/bee

End point: Acute contact toxicity

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

tribenuron-methyl (ISO):

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 738 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Crustaceans): > 320 mg/l

Exposure time: 48 h

EC50 (Daphnia magna (Water flea)): > 894 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 0.0208

ma/

Exposure time: 120 h

EC50 (Lemna gibba (duckweed)): 0.00424 mg/l

Exposure time: 14 d

Toxicity to fish (Chronic tox-

icity)

NOEC (Cyprinodon variegatus (sheepshead minnow)): 114

mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

NOEC (Oncorhynchus mykiss (rainbow trout)): 560 mg/l

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

Exposure time: 21 d

Toxicity to daphnia and other aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 41 mg/l

Exposure time: 21 d

Toxicity to soil dwelling or-

ganisms

NOEC (Eisenia fetida (earthworms)): 3.2 mg/kg

Exposure time: 56 d

Toxicity to terrestrial organ-

isms

LD50 (Colinus virginianus (Bobwhite quail)): > 2,250 mg/kg

LD50 (Colinus virginianus (Bobwhite quail)): > 5,620 ppm

Remarks: Dietary

LD50 (Anas platyrhynchos (Mallard duck)): > 5,620 ppm

Remarks: Dietary

LD50 (Apis mellifera (bees)): > 98.4 μg/bee

Exposure time: 48 h

End point: Acute contact toxicity

LD50 (Apis mellifera (bees)): > 9.1 μg/bee

Exposure time: 48 h

End point: Acute oral toxicity

Ecotoxicology Assessment

Acute aquatic toxicity : Very toxic to aquatic life.

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

kaolin:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 1,000 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Raphidocelis subcapitata (freshwater green alga)): >

100 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

Remarks: No data available

Toxicity to microorganisms

Remarks: No data available

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 03/03/2025 50000126 Date of first issue: 02/01/2018 1.2

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Toxicity to fish LC50 (Zebra fish): > 10 - 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: Based on data from similar materials

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

ma/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

EC10 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: Based on data from similar materials

EC10 (Daphnia magna (Water flea)): > 10 - 100 mg/l

Toxicity to daphnia and other : aquatic invertebrates (Chron-

Exposure time: 21 d

Method: OECD Test Guideline 211 ic toxicity)

Remarks: Based on data from similar materials

Persistence and degradability

Components:

thifensulfuron-methyl (ISO):

Remarks: Not readily biodegradable. Biodegradability

Primary degradation half-lives vary with circumstances, from a

few days to a few weeks in aerobic water and soil.

tribenuron-methyl (ISO):

Biodegradability Biodegradation: 29.4 %

Exposure time: 28 d

kaolin:

Biodegradability Remarks: The methods for determining biodegradability are

not applicable to inorganic substances.

Residues, petroleum, catalytic reformer fractionator, sulfonated, polymers with formaldehyde, sodium salts:

Biodegradability Result: Not readily biodegradable.

Remarks: Based on data from similar materials

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version 1.2

Revision Date: 03/03/2025

SDS Number: 50000126

Date of last issue: 02/01/2018 Date of first issue: 02/01/2018

Lignosulfonic acid, ethoxylated, sodium salts:

Biodegradability : Result: Not readily biodegradable.

Bioaccumulative potential

Components:

thifensulfuron-methyl (ISO):

Bioaccumulation : Bioconcentration factor (BCF): 1

Remarks: Does not bioaccumulate.

tribenuron-methyl (ISO):

Bioaccumulation : Bioconcentration factor (BCF): < 1

Remarks: Does not bioaccumulate.

Partition coefficient: n-

octanol/water

log Pow: -0.38

kaolin:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-

octanol/water

Remarks: Not applicable

Mobility in soil

Components:

thifensulfuron-methyl (ISO):

Distribution among environ-

mental compartments

Koc: 28.3, log Koc: 1.45

Remarks: Highly mobile in soils

Stability in soil

tribenuron-methyl (ISO):

Distribution among environmental compartments Remarks: Under normal conditions the active ingredient/s is/are of high to intermediate mobility in soil. There is a poten-

tial for leaching to groundwater.

kaolin:

Distribution among environ-

mental compartments

Remarks: Low mobility in soil.

Other adverse effects

Product:

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

18 / 24

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

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

Environmental hazards

Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water

mark.

Do not contaminate water when cleaning equipment or dis-

posing of equipment washwaters or rinsate.

An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Very toxic to aquatic life with long lasting effects.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : The product should not be allowed to enter drains, water

courses or the soil.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product. Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number : UN 3077

Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S

(Tribenuron-methyl, Thifensulfuron-methyl)

Class : 9

Subsidiary risk : ENVIRONM.

Packing group : III

Labels : 9 (ENVIRONM.)

Environmentally hazardous : yes

IATA-DGR

UN/ID No. : UN 3077

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

(Tribenuron-methyl, Thifensulfuron-methyl)

Class : 9

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018
1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

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

956

(Tribenuron-methyl, Thifensulfuron-methyl)

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 Road

UN/ID/NA number : UN 3077

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

(Tribenuron-methyl, Thifensulfuron-methyl)

Class : 9
Packing group : III
Labels : CLASS 9

ERG Code : 171

Marine pollutant : yes(Tribenuron-methyl, Thifensulfuron-methyl)

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 : 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.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

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 : No SARA Hazards

SARA 313 : The following components are subject to reporting levels es-

tablished by SARA Title III, Section 313:

tribenuron-methyl 101200-48-0 >= 30 - < 50 %

(ISO)

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

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

formaldehyde 50-00-0 >= 0 - < 0.1 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

formaldehyde 50-00-0 >= 0 - < 0.1 %

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

kaolin 1332-58-7 formaldehyde 50-00-0

Pennsylvania Right To Know

tribenuron-methyl (ISO) 101200-48-0 thifensulfuron-methyl (ISO) 79277-27-3 kaolin 1332-58-7 sodium sulphate 7757-82-6

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

formaldehyde 50-00-0

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

California Prop. 65

WARNING: This product can expose you to chemicals including kaolin, formaldehyde, 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

kaolin 1332-58-7

California Regulated Carcinogens

kaolin 1332-58-7

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

TCSI : Not in compliance with the inventory

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

AIIC : Not in compliance with the inventory

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.

FIFRA information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Causes eye irritation, Avoid contact with skin, eyes and clothing., Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

according to the OSHA Hazard Communication Standard



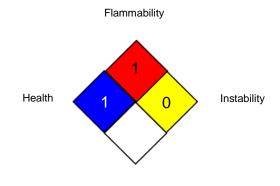
T-PAC XP™ herbicide

Version Revision Date: SDS Number: Date of last issue: 02/01/2018 1.2 03/03/2025 50000126 Date of first issue: 02/01/2018

SECTION 16. OTHER INFORMATION

Further information

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 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

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 P0 / TWA : 8-hour time weighted average OSHA Z-1 / 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 Dan-

according to the OSHA Hazard Communication Standard



T-PAC XP™ herbicide

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 02/01/2018

 1.2
 03/03/2025
 50000126
 Date of first issue: 02/01/2018

gerous 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 -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.

© 2021-2025 FMC Corporation. All Rights Reserved.

End of Material Safety Data Sheet