



SAFETY DATA SHEET

Cynoff 25UL

SDS # : FO001288-A
Revision date: 2018-04-06
Format: AP
Version 2

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name Cynoff 25UL

Product Code(s) FO001288-A

Synonyms CYPERMETHRIN (FMC 30980); (RS)- α -cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name); cyano(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name)

Active Ingredient(s) Cypermethrin

Chemical Family Pyrethroid Pesticide

Recommended Use: Insecticide.

Restrictions on Use: See section 16 for more information.

Manufacturer/Supplier FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104
(215) 299-6000 (General Information)
msdsinfo@fmc.com (E-Mail General Information)

Emergency telephone

Medical Emergencies:
1 800 / 331-3148 (ProPharma Group - U.S.A. & Canada)
1 651 / 632-6793 (ProPharma Group - All Other Countries - Collect)

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)

Section 2: HAZARDS IDENTIFICATION

GHS - Classification

Aspiration toxicity	Category 1
Acute toxicity - Oral	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1B
Carcinogenicity	Category 2
STOT - single exposure	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Acute aquatic toxicity	Category 1
Chronic aquatic toxicity	Category 1

Flammable liquids

Category 3

Label Elements**Signal Word****Danger****Hazard Statements**

H301 - Toxic if swallowed
 H304 - May be fatal if swallowed and enters airways
 H317 - May cause an allergic skin reaction
 H318 - Causes serious eye damage
 H332 - Harmful if inhaled
 H351 - Suspected of causing cancer
 H373 - May cause damage to organs through prolonged or repeated exposure
 H410 - Very toxic to aquatic life with long lasting effects
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H226 - Flammable liquid and vapor

Precautionary Statements - Prevention

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
 P264 - Wash face, hands and any exposed skin thoroughly after handling
 P270 - Do not eat, drink or smoke when using this product
 P271 - Use only outdoors or in a well-ventilated area
 P272 - Contaminated work clothing should not be allowed out of the workplace
 P280 - Wear protective gloves
 P260 - Do not breathe dust/fume/gas/mist/vapors/spray
 P273 - Avoid release to the environment
 P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
 P233 - Keep container tightly closed
 P240 - Ground/bond container and receiving equipment
 P241 - Use explosion-proof electrical/ventilating/lighting/.?/equipment
 P242 - Use only non-sparking tools
 P243 - Take precautionary measures against static discharge
 P235 - Keep cool

Precautionary Statements - Response

P308 + P313 - If exposed or concerned: Get medical advice/attention
 P321 - Specific treatment (see .? on this label)
 P321 - Specific treatment (see supplemental first aid instructions on this label)
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing
 P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
 P363 - Wash contaminated clothing before reuse
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower

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

P310 - Immediately call a POISON CENTER or doctor

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P331 - Do NOT induce vomiting

P330 - Rinse mouth

In case of fire: Use CO₂, dry chemical, or foam for extinction

P391 - Collect spillage

Precautionary Statements - Storage

P405 - Store locked up

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

Precautionary Statements - Disposal

P501 - Dispose of contents/container to an approved waste disposal plant

Other Information

May be fatal if swallowed and enters airways

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms CYPERMETHRIN (FMC 30980); (RS)- α -cyano-3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name); cyano(3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name)

Chemical name	CAS-No	Weight %
Cypermethrin	52315-07-8	2.92643
Naphtha (petroleum), heavy aromatic	64742-94-5	30.079
Naphthalene	91-20-3	2.97782
1,2,4-Trimethylbenzene	95-63-6	0.51134

Section 4: FIRST AID MEASURES

Inhalation	Remove to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get medical attention if irritation develops and persists.
Eye Contact	Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Immediate medical attention is required.
Ingestion	Do NOT induce vomiting. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person. Immediate medical attention is required.
Most important symptoms and effects, both acute and delayed	Causes serious eye damage.
Protection of first-aiders	Use personal protective equipment. See Section 8 for more detail.
Indication of immediate medical attention and special treatment needed, if necessary	Treat symptomatically. This product contains aromatic hydrocarbons that can produce a severe pneumonitis if aspirated during vomiting. Consideration should be given to gastric lavage with endotracheal tube in place. Digestible fats, oils, or alcohol may increase absorption and so should be avoided. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

Section 5: FIRE FIGHTING MEASURES

Flammable properties Moderately combustible. The product may form flammable mixtures with air when heated

above the flash point.

Suitable Extinguishing Media Foam, Dry chemical or CO₂. Soft stream or water fog only if necessary. Contain all runoff.

Unsuitable extinguishing media No information available

Specific Hazards Arising from the Chemical Keep product and empty container away from heat and sources of ignition.

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

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

Environmental Precautions Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

Methods for Containment Dike to confine spill and absorb with non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label contents for disposal.

Methods for cleaning up To clean and neutralize a contaminated area, scrub area with a solution of detergent (e.g. commercial product such as SuperSoap™, Tide®, Spic and Span®, or other high pH detergent) and water. Let solution sit for 5 minutes. Use a stiff brush to scrub affected area. Repeat if necessary to remove visible staining. Additional decontamination can be made by applying bleach (Clorox® or equivalent) to affected area. Absorb, as above, any excess liquid and add to the drums of waste already collected. Dispose of waste as indicated in Section 13.

Section 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.

Materials to avoid None known

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

Component	China	Japan	Korea	Australia	Taiwan
Naphthalene 91-20-3 (2.97782)	TWA: 50 mg/m ³ STEL: 75 mg/m ³ S* C1 C3	C2B ISHL/ACL: 10 ppm	S* STEL: 15 ppm TWA: 10 ppm	STEL 15 ppm STEL 79 mg/m ³ TWA 10 ppm TWA 52 mg/m ³	STEL 15 ppm STEL 78 mg/m ³
1,2,4-Trimethylbenzene 95-63-6 (0.51134)		OEL: 25 ppm OEL: 120 mg/m ³			

Engineering measures Provide mechanical local exhaust ventilation to prevent release of mist into the work area. If release is expected, use respiratory protection. Ventilate all transport vehicles prior to unloading.

Personal protective equipment

Respiratory Protection	For dust, splash, mist or spray exposures wear a elastomeric full-face or half mask respirator with appropriate cartridges and/or filters which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization).
Hand Protection	Wear protective gloves tested to relevant standards (e.g. Europe: EN374, US: F739, AS/NZA: 2161). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity, and specific local conditions. Always seek advice from glove suppliers. Contaminated gloves should be replaced. For prolonged contact, gloves with at least 0.7 mm in thickness and breakthrough time of more than 480 minutes are recommended. For short-term contact, gloves with at least 0.4 mm in thickness and breakthrough time of more than 30 minutes are recommended. Recommended glove material includes butyl rubber, fluorocarbon rubber, nitrile rubber, chloroprene rubber or neoprene.
Eye/Face Protection	Tightly fitting safety goggles. Face-shield.
Skin and Body Protection	Minimize skin contamination by following good industrial hygiene practices. Wear suitable protective clothing. Protective shoes or boots.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Light yellow Liquid
Odor	Aromatic Solvent
Color	Light yellow
Odor threshold	No information available
pH	No information available
Melting point/freezing point	No information available
Boiling Point/Range	No information available
Flash point	42 °C (Estimate based upon the ingredients)
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	0.8680 - 0.8720 (water=1)
Water solubility	No information available
Solubility(ies)	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Viscosity, kinematic	No information available
Viscosity, dynamic	No information available
Molecular weight	416.3 (cypermethrin)
Density	No information available
Bulk density	7.23 - 7.26
K_{st}	>0 bar m/s

Section 10: STABILITY AND REACTIVITY

Reactivity	Not applicable
Stability	Stable under recommended storage conditions
Hazardous reactions	None under normal processing.

Hazardous polymerization Hazardous polymerization does not occur.

Conditions to Avoid Excessive heat.

Incompatible products No information available.

Hazardous Decomposition Products Thermal decomposition can lead to release of irritating gases and vapors: Carbon monoxide (CO), Carbon dioxide (CO₂), hydrogen cyanide, Hydrogen chloride, Chlorine.

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Numerical measures of toxicity - Product Information

LD50 Oral Similar formulation 137 mg/kg (rat)
LD50 Dermal Similar formulation > 2,000 mg/kg (rat) (rabbit)
LC50 Inhalation Similar formulation 2.18 mg/L 4 hr (rat) (rat)

Skin corrosion/irritation Moderately irritating.
Serious eye damage/eye irritation Moderately irritating (rabbit).
Sensitization May cause sensitization by skin contact.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Mutagenicity Cypermethrin: Not genotoxic in laboratory studies.
Carcinogenicity Cypermethrin caused an increase in benign lung tumors in mice, but not in rats. EPA has classified cypermethrin as a possible human carcinogen based on this information, but does not regulate based on its low cancer risk. EPA has classified cypermethrin as a possible human carcinogen based on this information, but does not regulate based on its low cancer risk.

Reproductive toxicity Cypermethrin: No toxicity to reproduction in animal studies.
Developmental toxicity Cypermethrin: Not teratogenic in animal studies.
STOT - single exposure May cause respiratory irritation. See listed target organs below.
STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure. See listed target organs below.

Chronic toxicity Cypermethrin: Long-term exposure caused neurotoxicity (body tremors, decreased motor activity), decreased body weight and increased liver and spleen weight.

Target organ effects Cypermethrin: Central Nervous System.
Neurological effects Cypermethrin: Causes clinical signs of neurotoxicity (body tremors, decreased motor activity and impaired gait) following acute, subchronic or chronic exposure. Cypermethrin: Cause clinical signs of neurotoxicity (body tremors, decreased motor activity and impaired gait) following acute, subchronic or chronic exposure.

Symptoms Signs of toxicity in laboratory animals included hypertonicity, ataxia, lethargy, convulsions, gasping, salivation, dyspnea, and alopecia. Large doses of cypermethrin ingested by laboratory animals produced signs of toxicity including loss of motor control, tremors, decreased activity, urinary incontinence, incoordination, increased sensitivity to sound and convulsions.

Aspiration hazard Potential for aspiration if swallowed. May be fatal if swallowed and enters airways.

Chemical name	China	IARC
Cypermethrin		Group 2A
IARC (International Agency for Research on Cancer)		Group 2B - Possibly Carcinogenic to Humans

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Very toxic to aquatic life with long lasting effects.

Cypermethrin (52315-07-8)				
Active Ingredient(s)	Duration	Species	Value	Units
Cypermethrin	48 h EC50	Crustacea	0.3	µg/L
	96 h LC50	Fish	2.8	µg/L
	72 h EC50	Algae	> 0.1	mg/L
	21 d NOEC	Crustacea	0.04	µg/L
	21 d NOEC	Fish	0.03	µg/L
	96 h NOEC	Algae	1.3	mg/L

Persistence and degradability	Cypermethrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.
Bioaccumulation	Cypermethrin: The substance has a potential for bioconcentration.
Mobility	Cypermethrin: Immobile. Not expected to reach groundwater.
Other Adverse Effects	No information available.

Section 13: DISPOSAL CONSIDERATIONS

Waste disposal methods	Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of in accordance with federal, state and local regulations.

Section 14: TRANSPORT INFORMATION

IMDG/IMO

UN/ID no	UN3351
Proper Shipping Name	Pyrethroid pesticide, liquid, toxic, flammable
Hazard class	6.1
Subsidiary Hazard Class	3
Packing Group	III
EmS No.	F-E, S-D
Marine Pollutant	Cypermethrin

ICAO/IATA

UN/ID no	UN3351
Proper Shipping Name	Pyrethroid pesticide, liquid, toxic, flammable
Hazard class	6.1
Subsidiary Hazard Class	3
Packing Group	III
Marine Pollutant	Cypermethrin

Section 15: REGULATORY INFORMATION

International Inventories

A food, food additive, drug, cosmetic, or device, when manufactured, processed or distributed in commerce for use as a food, food additive, drug, cosmetic, or device may not be subject to local notification requirements. Check local regulations for more

information.

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Cypermethrin 52315-07-8			X		X	X	X	X
Naphtha (petroleum), heavy aromatic 64742-94-5	X	X	X		X	X	X	X
Naphthalene 91-20-3	X	X	X	X	X	X	X	X
1,2,4-Trimethylbenzene 95-63-6	X	X	X	X	X	X	X	X

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

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

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Section 16: OTHER INFORMATION

Prepared By:

FMC Corporation

FMC Logo - Trademark of FMC Corporation

© 2018 FMC Corporation. All Rights Reserved.

Revision date:

2018-04-06

Revision note

(M)SDS sections updated.

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.

End of Safety Data Sheet