

SAFETY DATA SHEET
MARSHAL® 250 g/L EC INSECTICIDE

SDS # : 3702-A
Revision date: 2020-11-18
Format: NA
Version 1.06



1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name MARSHAL® 250 g/L EC INSECTICIDE

Other means of identification

Product Code(s) 3702-A

Synonyms CARBOSULFAN (FMC 35001): 2,3-dihydro-2,2-dimethyl-7-benzofuranyl [(dibutylamino)thio]methylcarbamate (CAS name); 2,3-dihydro-2,2-dimethylbenzofuran-7-yl (dibutylaminothio)methylcarbamate (IUPAC name)

Active Ingredient(s) Carbosulfan

Chemical Family Carbamate Pesticide

Alternate Commercial Name Marshal 25 EC; Marshal 250 EC; Marshal 25 LE; Posse; Master 25 EC

Recommended use of the chemical and restrictions on use

Recommended Use: Insecticide

Restrictions on Use: Use as recommended by the label.

Supplier Address

FMC Corporation
2929 Walnut Street
Philadelphia, PA 19104
(215) 299-6000 (General Information)
SDS-Info@fmc.com (E-Mail General Information)

Emergency telephone number

For leak, fire, spill, or accident emergencies, call:
800 / 424 9300 (CHEMTREC - U.S.A.)
703 / 741-5970 (CHEMTREC - International)
703 / 527 3887 (CHEMTREC - Alternate)

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

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 2

Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1B
Carcinogenicity	Category 2
Specific target organ toxicity (single exposure)	Category 1
Specific target organ toxicity (repeated exposure)	Category 1
Aspiration toxicity	Category 1
Flammable liquids	Category 3

GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

Danger

Hazard Statements

H301 - Toxic if swallowed
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H351 - Suspected of causing cancer
H370 - Causes damage to organs
H372 - Causes damage to organs through prolonged or repeated exposure

Physical Hazards

H226 - Flammable liquid and vapor



Precautionary Statements - Prevention

P202 - Do not handle until all safety precautions have been read and understood
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P260 - Do not breathe dust/fume/gas/mist/vapors/spray
P271 - Use only outdoors or in a well-ventilated area
P284 - Wear respiratory protection
P272 - Contaminated work clothing should not be allowed out of the workplace
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
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

P320 - Specific treatment is urgent (see supplemental first aid instructions on this label)
P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/ attention
P312 - Call a POISON CENTER or doctor if you feel unwell
P363 - Wash contaminated clothing before reuse
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

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

P370 + P378 - In case of fire: Use Carbon dioxide (CO₂), Dry chemical, Alcohol-resistant foam, Water spray for extinction

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

Hazards not otherwise classified (HNOC)

No hazards not otherwise classified were identified.

Other Information

Very toxic to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Carbamate Pesticide.

Chemical name	CAS-No	Weight %
Carbosulfan	55285-14-8	27
Carbofuran	1563-66-2	0.5
Naphtha (petroleum), heavy aromatic	64742-94-5	20-30
Petroleum distillates, solvent dewaxed light paraffinic	64742-56-9	20-30
Pseudocumene	95-63-6	<10
Petroleum distillates, solvent dewaxed heavy paraffinic	64742-65-0	5-10
Propylene glycol	57-55-6	1-5
Cumene	98-82-8	0.1-1

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if eye irritation develops or persists.
Skin Contact	If skin irritation occurs: Get medical advice/ attention. IF ON SKIN: Wash with plenty of soap and water.
Inhalation	Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.
Ingestion	Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	Causes serious eye irritation. Allergic skin reactions.
Indication of immediate medical attention and special treatment needed, if necessary	Contains petroleum distillate. Vomiting may cause aspiration pneumonia. This product contains a reversible cholinesterase inhibitor. Atropine sulfate is antidotal. If cyanosis is absent: Adults - start treatment by giving 2 mg atropine intravenously or intramuscularly, if

necessary, and repeat with 0.4 - 2.0 mg atropine at 15 minute intervals until atropinization occurs (tachycardia, flushed skin, dry mouth, mydriasis); Children under 12 - initial dose = 0.05 mg/kg body weight and repeat dose = 0.02 - 0.05 mg/kg body weight. Use of oximes such as 2-PAM is controversial. Observe patient to ensure that these symptoms do not recur as atropinization wears off. If in eyes, instill one drop of homatropine. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media	Foam. Carbon dioxide (CO ₂). Dry chemical. Soft stream or water fog only if necessary.
Specific Hazards Arising from the Chemical	Thermal decomposition can lead to release of irritating and toxic gases and vapors Combustible liquid
Explosion data	
Sensitivity to Mechanical Impact	Not sensitive.
Sensitivity to Static Discharge	Static electricity might be sufficient to ignite dust clouds. Possibility of ignition will depend on the minimum ignition energy (MIE) and the type of operations undertaken with the material. MIE values are not provided in this SDS.
Protective equipment and precautions for firefighters	Isolate fire area. Evaluate downwind. Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Isolate and post spill area. Remove all sources of ignition. 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 prevent runoff.
Methods for cleaning up	Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Clean and neutralize spill area, tools and equipment for a minimum contact of one hour with vinegar-alcohol solution, then by bleach, soap, and water. 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.

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.
Incompatible products	No information available Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Carbofuran (1563-66-2)	TWA: 0.1 mg/m ³	-	TWA: 0.1 mg/m ³	Mexico: TWA 0.1 mg/m ³
Pseudocumene	-	-	TWA: 25 ppm	-

(95-63-6)			TWA: 125 mg/m ³	
Cumene (98-82-8)	TWA: 50 ppm	TWA: 50 ppm TWA: 245 mg/m ³ S*	IDLH: 900 ppm TWA: 50 ppm TWA: 245 mg/m ³	Mexico: TWA 50 ppm
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Carbofuran (1563-66-2)	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.1 mg/m ³ inhalable fraction and vapor	TWA: 0.1 mg/m ³
Propylene glycol (57-55-6)	-	-	TWA: 10 mg/m ³ aerosol only TWA: 50 ppm aerosol and vapor TWA: 155 mg/m ³ aerosol and vapor	-
Cumene (98-82-8)	TWA: 25 ppm STEL: 75 ppm	TWA: 50 ppm TWA: 246 mg/m ³	TWA: 50 ppm	TWA: 50 ppm TWA: 246 mg/m ³

Appropriate engineering 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.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

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

Skin and Body Protection

Minimize skin contamination by following good industrial hygiene practices. Wear suitable protective clothing. Protective shoes or boots.

Hand Protection

Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.

Respiratory Protection

For dust, splash, mist or spray exposures wear a full-face air-supplying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization)

Hygiene measures

Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

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 product as supplied

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Amber Liquid
Physical State	Liquid
Color	Dark amber
Odor	Hydrocarbon-like
Odor threshold	No information available
pH	No information available
Melting point/freezing point	Not applicable
Boiling Point/Range	No information available
Flash point	42.5 °C / 108.5 °F Tag Closed Cup

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
Relative density	7.74 lb/gal
Specific gravity	0.932 @ 20°C
Water solubility	Emulsifies
Solubility in other solvents	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
Explosive properties	No information available
Oxidizing properties	No information available
Molecular weight	No information available
Bulk density	No information available
K _{st}	>0 bar m/s

10. STABILITY AND REACTIVITY

Reactivity	Not applicable
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	Contact with aqueous acids may produce carbofuran, carbon disulfide, and methylamine.
Hazardous polymerization	Hazardous polymerization does not occur.
Conditions to avoid	Excessive heat. Extreme risk of explosion by shock, friction, fire or other sources of ignition.
Incompatible materials	No information available.
Hazardous Decomposition Products	Burning produces obnoxious and toxic fumes: Carbon oxides (COx), Sulfur oxides, Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Product Information

LD50 Oral	59.9 mg/kg (rat)
LD50 Dermal	> 1520 mg/kg (rabbit)
LC50 Inhalation (dust)	0.265 mg/L 4 hr; (1.06 mg/L 1 hr (rat)
Serious eye damage/eye irritation	Moderately irritating to the eyes.
Skin corrosion/irritation	Moderately irritating.
Sensitization	May cause sensitization by skin contact

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation (vapor)
Naphtha (petroleum), heavy aromatic (64742-94-5)	300-2000 mg/kg	> 2 mL/kg (Nyúl)	>5,2 mg/L
Petroleum distillates, solvent dewaxed light paraffinic (64742-56-9)	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 5399 mg/m ³ (Rat) 4 h
Pseudocumene (95-63-6)	3280 mg/kg (Rat)	3160 mg/kg (Rabbit)	18 g/m ³ (Rat) 4 h
Petroleum distillates, solvent dewaxed heavy paraffinic (64742-65-0)	> 15000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	> 2400 mg/m ³ (Rat) 4 h

Propylene glycol (57-55-6)	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	
Cumene (98-82-8)	1400 mg/kg (Rat)	3160 mg/kg (Rabbit)	> 17,6 mg/L (Rat) 4 h

Information on toxicological effects

Symptoms

This substance is a reversible cholinesterase-inhibiting pesticide, which elicits symptoms in humans typical of cholinesterase inhibition including headache, light-headedness, weakness, abdominal cramps, nausea, excessive salivation, perspiration and blurred vision. More severe signs of cholinesterase inhibition include tearing, pin-point pupils, excessive respiratory secretions, cyanosis, convulsions, generalized tremor and coma. Excessive cholinesterase inhibition may result in death.

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

Chronic toxicity

Effects are expected to be similar to those that are seen with acute toxicity.

Mutagenicity

Carbosulfan, Carbofuran: Not genotoxic in laboratory studies

Carcinogenicity

Carbosulfan, Carbofuran: No evidence of carcinogenicity from animal studies.

Neurological effects

Carbosulfan, Carbofuran: Chronic exposure of laboratory animals has caused decreased cholinesterase activity (erythrocyte, plasma, and/or brain).

Reproductive toxicity

Carbosulfan, Carbofuran: No toxicity to reproduction in animal studies.

Developmental toxicity

Carbosulfan: Caused fetal incomplete ossification and major vessel variations in animal studies. Carbofuran: Not teratogenic in animal studies.

STOT - single exposure

Causes damage to organs. See listed target organs below.

STOT - repeated exposure

Causes damage to organs through prolonged or repeated exposure. See listed target organs below.

Target organ effects

Nervous system, Bladder, Gastrointestinal tract, Red blood cells, Acetylcholinesterase Inhibition

Neurological effects

Carbosulfan, Carbofuran: Chronic exposure of laboratory animals has caused decreased cholinesterase activity (erythrocyte, plasma, and/or brain).

Aspiration hazard

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

Chemical name	ACGIH	IARC	NTP	OSHA
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	A2		Known	
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	A2		Known	
Cumene 98-82-8		Group 2B	Reasonably Anticipated	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

Reasonably Anticipated - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

12. ECOLOGICAL INFORMATION

Ecotoxicity

Carbosulfan (55285-14-8)				
Active Ingredient(s)	Duration	Species	Value	Units
Carbosulfan	48 h EC50	Crustacea	1.5	µg/L
	72 h EC50	Algae	47	mg/L
	96 h LC50	Fish	0.015	mg/L
	21 d NOEC	Crustacea	3.2	µg/L
	21 d NOEC	Fish	3.0	µg/L

Carbofuran (1563-66-2)				
Active Ingredient(s)	Duration	Species	Value	Units
Carbofuran	48 h EC50	Crustacea	0.75	mg/L
	72 h EC50	Algae	19	mg/L
	96 h LC50	Fish	0.18	mg/L
	21 d NOEC	Crustacea	0.23	µg/L
	96 h NOEC	Algae	3.2	mg/L
	21 d NOEC	Fish	5.22	µg/L

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
2-Ethylhexan-1-ol 104-76-7	72 h EC50: = 11.5 mg/L (Desmodesmus subspicatus)	96 h LC50: 10.0 - 33.0 mg/L (Lepomis macrochirus) static 96 h LC50: 27 - 29.5 mg/L (Pimephales promelas) flow-through 96 h LC50: 32 - 37 mg/L (Oncorhynchus mykiss) static 96 h LC50: = 29.7 mg/L (Pimephales promelas) static 96 h LC50: > 7.5 mg/L (Oncorhynchus mykiss)	48 h EC50: = 39 mg/L (Daphnia magna)
Xylenes 1330-20-7		96 h LC50: 13,1 - 16,5 mg/L (Lepomis macrochirus) flow-through 96 h LC50: 13,5 - 17,3 mg/L (Oncorhynchus mykiss) 96 h LC50: 2,661 - 4,093 mg/L (Oncorhynchus mykiss) static 96 h LC50: 23,53 - 29,97 mg/L (Pimephales promelas) static 96 h LC50: 30,26 - 40,75 mg/L (Poecilia reticulata) static 96 h LC50: 7,711 - 9,591 mg/L (Lepomis macrochirus) static 96 h LC50: = 13,4 mg/L (Pimephales promelas) flow-through 96 h LC50: = 19 mg/L (Lepomis macrochirus) 96 h LC50: = 780 mg/L (Cyprinus carpio) semi-static 96 h LC50: > 780 mg/L (Cyprinus carpio)	48 h LC50: = 0,6 mg/L (Gammarus lacustris) 48 h EC50: = 3,82 mg/L (water flea)
Carbofuran 1563-66-2	19&3.2	0.18&0.0052	0.75&0.00023
Carbosulfan 55285-14-8	47	0.015&0.003	0.0015&0.0032
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9		96 h LC50: > 5000 mg/L (Oncorhynchus mykiss)	48 h EC50: > 1000 mg/L (Daphnia magna)
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0		96 h LC50: > 5000 mg/L (Oncorhynchus mykiss)	48 h EC50: > 1000 mg/L (Daphnia magna)
Naphtha (petroleum), heavy aromatic 64742-94-5	72 h EC50: = 2,5 mg/L (Skeletonema costatum)	96 h LC50: = 1740 mg/L (Lepomis macrochirus) static 96 h LC50: = 19 mg/L (Pimephales promelas) static 96 h LC50: = 2,34 mg/L (Oncorhynchus mykiss) 96 h LC50: = 41 mg/L (Pimephales promelas) 96 h LC50: = 45 mg/L (Pimephales promelas) flow-through	48 h EC50: = 0,95 mg/L (Daphnia magna)
Petroleum naphtha, light aromatic 64742-95-6		96 h LC50: = 9.22 mg/L (Oncorhynchus mykiss)	48 h EC50: = 6.14 mg/L (Daphnia magna)
Soybean oil, epoxidized 8013-07-8	72 h EC50: = 8 mg/L (Desmodesmus subspicatus)	48 h LC50: = 900 mg/L (Leuciscus idus)	24 h EC50: > 100 mg/L (Daphnia magna)
1,2,4-Trimethylbenzene 95-63-6		96 h LC50: 7.19 - 8.28 mg/L (Pimephales promelas) flow-through	48 h EC50: = 6.14 mg/L (Daphnia magna)
Pseudocumene 95-63-6		96 h LC50: 7.19 - 8,28 mg/L (Pimephales promelas) flow-through	48 h EC50: = 6,14 mg/L (Daphnia magna)
Cumene 98-82-8	72 h EC50: = 2,6 mg/L (Pseudokirchneriella subcapitata)	96 h LC50: 6,04 - 6,61 mg/L (Pimephales promelas) flow-through 96 h LC50: = 2,7 mg/L (Oncorhynchus mykiss) semi-static	48 h EC50: 7,9 - 14,1 mg/L (Daphnia magna) Static 48 h EC50: = 0,6 mg/L (Daphnia magna)

		96 h LC50: = 4,8 mg/L (Oncorhynchus mykiss) flow-through 96 h LC50: = 5,1 mg/L (Poecilia reticulata) semi-static	
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Persistence and degradability	Carbosulfan: Non-persistent. Readily hydrolyzed. Not readily biodegradable. Carbofuran: Non-persistent. Does not readily hydrolyze. Not readily biodegradable.
Bioaccumulation	Carbosulfan: The substance has a potential for bioconcentration. Carbofuran: The substance does not have a potential for bioconcentration.
Mobility	Carbosulfan: Slightly mobile. Carbofuran: Moderately mobile.

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 containers and packages	Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. TRANSPORT INFORMATION

DOT

UN/ID no	UN2991
Proper Shipping Name	Carbamate pesticides, liquid, toxic, flammable
Hazard class	6.1
Subsidiary class	3
Packing Group	II
Reportable Quantity (RQ)	Carbofuran is in an "RQ" quantity when this material meets or exceeds 1865 pounds (233 gallons) per package.
Marine Pollutant	Carbosulfan, Carbofuran.
Description	UN2991, Carbamate pesticides, liquid, toxic, flammable (Carbosulfan, Carbofuran), 6.1 (3), II, Marine Pollutant, RQ

TDG

UN/ID no	UN2991
Proper Shipping Name	Carbamate pesticide, liquid, toxic, flammable
Hazard class	6.1
Subsidiary class	3
Packing Group	II
Marine Pollutant	Carbosulfan, Carbofuran.
Description	UN2991, Carbamate pesticides, liquid, toxic, flammable (Carbosulfan, Carbofuran), 6.1 (3), II, Marine Pollutant

ICAO/IATA

UN/ID no	UN2991
Proper Shipping Name	Carbamate pesticide, liquid, toxic, flammable
Hazard class	6.1
Subsidiary Hazard Class	3
Packing Group	II
Description	UN2991, Carbamate pesticides, liquid, toxic, flammable (Carbosulfan, Carbofuran), 6.1 (3), II, Marine Pollutant

IMDG/IMO

UN/ID no	UN2991
Proper Shipping Name	Carbamate pesticide, liquid, toxic, flammable
Hazard class	6.1

MARSHAL® 250 g/L EC INSECTICIDE

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Subsidiary Hazard Class 3
Packing Group II
EmS No. F-A, S-A
Special Provisions Flash Point = 42.5°C / 108.5°F
Environmental Hazards Carbosulfan, Carbofuran
Description UN2991, Carbamate pesticides, liquid, toxic, flammable (Carbosulfan, Carbofuran), 6.1 (3), II, Marine Pollutant

15. REGULATORY INFORMATION**U.S. Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values %
Carbofuran - 1563-66-2	1563-66-2	0.5	1.0
Pseudocumene - 95-63-6	95-63-6	<10	1.0
Cumene - 98-82-8	98-82-8	0.1-1	0.1

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic health hazard	Yes
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

Clean Water Act

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Xylenes 1330-20-7	100 lb			X
Carbofuran 1563-66-2	10 lb			X

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Xylenes 1330-20-7	100 lb 45.4 kg	
Carbofuran 1563-66-2	10 lb 4.54 kg	10 lb
Carbosulfan 55285-14-8	1000 lb 454 kg	
Cumene 98-82-8	5000 lb 2270 kg	

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:

WARNING

MARSHAL® 250 g/L EC INSECTICIDE

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May be fatal if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation.
 This pesticide is highly toxic to fish, birds and other wildlife.

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical name	California Prop. 65
Cumene - 98-82-8	Carcinogen

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Carbosulfan 55285-14-8	X		
Carbofuran 1563-66-2	X	X	X
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9		X	
Pseudocumene 95-63-6	X	X	X
Propylene glycol 57-55-6	X		X
Cumene 98-82-8	X	X	X

International Inventories

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINC S (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Carbosulfan 55285-14-8			X			X		
Carbofuran 1563-66-2	X	X	X	X	X	X	X	X
Naphtha (petroleum), heavy aromatic 64742-94-5	X	X	X		X	X	X	X
Petroleum distillates, solvent dewaxed light paraffinic 64742-56-9	X	X	X		X	X	X	X
Pseudocumene 95-63-6	X	X	X	X	X	X	X	X
Petroleum distillates, solvent dewaxed heavy paraffinic 64742-65-0	X	X	X		X	X	X	X
Propylene glycol 57-55-6	X	X	X	X	X	X	X	X
Cumene 98-82-8	X	X	X	X	X	X	X	X

CANADA

Not applicable

16. OTHER INFORMATION

NFPA	Health Hazards 3	Flammability 2	Instability 0	Special Hazards -
HMIS	Health Hazards 3*	Flammability 2	Physical hazard 0	Personal Protection X

*Indicates a chronic health hazard.

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End of Safety Data Sheet