SAFETY DATA SHEET

CARBOSULFAN 12.65 WT% EW

Version	Revision Date:	SDS Number (Internal):	Date of last issue: -
1.0	2022/02/28	50002361	Date of first issue: 2022/02/28

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CARBOSULFAN 12.65 WT% EW

Other means of identification : DAETAJA

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.

Manufacturer or supplier's details

Company : FMC Corporation

Address : 2929 WALNUT ST
PHILADELPHIA PA 19104

Telephone : (215) 299-6000

Emergency telephone : For leak, fire, spill or accident emergencies, call:
00308 132 549 (CHEMTREC)

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

2. HAZARDS IDENTIFICATION

GHS Classification

Acute toxicity (Oral) : Category 3

Acute toxicity (Inhalation) : Category 4

Short-term (acute) aquatic hazard : Category 1

Long-term (chronic) aquatic hazard : Category 1

GHS label elements

Hazard pictograms :

Signal Word : Danger

Hazard Statements : H301 Toxic if swallowed.
H332 Harmful if inhaled.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements :

Prevention:

P261 Avoid breathing mist or vapors.
P264 Wash the contact area thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.

Response:

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Rinse mouth.
P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.
P391 Collect spillage.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container according to wastes control act.

Other hazards which do not result in classification

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	Common Name	CAS-No.	Concentration (% w/w)
Solvent naphtha (petroleum), heavy arom.	Solvent naphtha (petroleum), heavy arom.; Kerosine — unspecified	64742-94-5	>= 10 - < 15
carbosulfan (ISO)	carbosulfan (ISO)	55285-14-8	>= 10 - < 15

Tristyrylphenol ethoxylates	Tristyrylphenol ethoxylates	99734-09-5	>= 1 - < 2.5
carbofuran (ISO)	carbofuran (ISO)	1563-66-2	>= 0.025 - < 0.25

4. FIRST AID MEASURES

General advice : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended.

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.

In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.

If inhaled : Consult a physician after significant exposure.
If unconscious, place in recovery position and seek medical advice.

If swallowed : Induce vomiting immediately and call a physician.
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.
Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed : Toxic if swallowed.
Harmful if inhaled.

Notes to physician : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable and unsuitable extinguishing media

Suitable extinguishing media : Water spray
Carbon dioxide (CO2)
Dry chemical
Foam

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 products	:	Carbon oxides Sulfur oxides Nitrogen oxides (NOx)
Specific extinguishing methods	:	Collect contaminated fire extinguishing water separately. This 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	:	Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Use personal protective equipment. Ensure adequate ventilation.
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	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapors/dust. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application 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	:	Prevent unauthorized access. 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. Observe label precautions. Electrical installations / working materials must comply with

the technological safety standards.

Further information on storage stability : No decomposition if stored and applied as directed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Solvent naphtha (petroleum), heavy arom.	64742-94-5	TWA	200 mg/m3 (total hydrocarbon vapor)	ACGIH
carbofuran (ISO)	1563-66-2	TWA (Inhalable fraction and vapor)	0.1 mg/m3	KR OEL
		TWA (Inhalable fraction and vapor)	0.1 mg/m3	ACGIH

Other ingredients, which are listed in section 3 but not listed in this section, do not have established occupational exposure limit values.

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
carbofuran (ISO)	1563-66-2	Acetylcholinesterase activity	In red blood cells	End of shift	70 % of an individual's baseline	ACGIH BEI
		Butyrylcholinesterase activity	In serum or plasma	End of shift	60 % of an individual's baseline	ACGIH BEI

Personal protective equipment. Among the following personal protective equipment, the PPEs which require safety certification need to be certified by KOSHA.

Respiratory protection : In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles

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.

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

Hygiene measures	:	Avoid contact with skin, eyes and clothing. When using do not eat or drink. When using do not smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	dark amber
Odor	:	hydrocarbon-like
pH	:	7 - 8 (10% solution in water)
Melting point/freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Self-ignition	:	No data available
Bulk density	:	7.74 lb/gal
Solubility(ies) Water solubility	:	emulsifiable
Density	:	0.932 g/cm3
Explosive properties	:	Not explosive
Oxidizing properties	:	Non-oxidizing

10. STABILITY AND REACTIVITY

Chemical stability and possibility of hazardous reactions	:	No decomposition if stored and applied as directed. No decomposition if stored and applied as directed.
Conditions to avoid	:	Protect from frost, heat and sunlight.
Incompatible materials	:	Strong oxidizing agents Strong bases Strong acids

Hazardous decomposition products	:	Nitrogen oxides (NOx) Carbon oxides Sulfur oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation

Health hazard information

Acute toxicity

Toxic if swallowed.
Harmful if inhaled.

Product:

Acute oral toxicity	:	LD50 (Mouse): 207 mg/kg
Acute inhalation toxicity	:	Acute toxicity estimate: 1.27 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Calculation method
Acute dermal toxicity	:	LD50 (Rat): > 4,000 mg/kg

Components:

Solvent naphtha (petroleum), heavy arom.:

Acute oral toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 420 Remarks: Based on data from similar materials
Acute inhalation toxicity	:	LC50 (Rat): > 4.688 mg/l Exposure time: 4 h Test atmosphere: vapor Assessment: The substance or mixture has no acute inhalation toxicity
Acute dermal toxicity	:	LD50 (Rabbit): > 2,000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

carbosulfan (ISO):

Acute oral toxicity	:	LD50 (Rat, female): 185 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, female): 0.15 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 (Rat): > 2,000 mg/kg

Tristyrylphenol ethoxylates:

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat, male and female): > 2,000 mg/kg
Method: OECD Test Guideline 402
Assessment: The substance or mixture has no acute dermal toxicity

carbofuran (ISO):

Acute oral toxicity : LD50 (Rat): 5.3 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.10 mg/l
Exposure time: 1 h
Test atmosphere: dust/mist

LC50 (Rat): 0.025 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

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

Skin corrosion/irritation

Product:

Species : Rabbit
Result : slight irritation

Components:

Solvent naphtha (petroleum), heavy arom.:

Species : Rabbit
Result : No skin irritation

Assessment : Repeated exposure may cause skin dryness or cracking.

carbosulfan (ISO):

Species : Rabbit
Result : slight irritation

Tristyrylphenol ethoxylates:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation

carbofuran (ISO):

Result : No skin irritation

Serious eye damage/eye irritation

Product:

Species : Rabbit
Result : No eye irritation

Components:

Solvent naphtha (petroleum), heavy arom.:

Species : Rabbit
Result : No eye irritation

carbosulfan (ISO):

Species : Rabbit
Result : slight irritation

Tristyrylphenol ethoxylates:

Species : Rabbit
Result : No eye irritation
Method : OECD Test Guideline 405

carbofuran (ISO):

Species : Rabbit
Result : No eye irritation

Respiratory or skin sensitization

Product:

Species : Guinea pig
Result : Not a skin sensitizer.

Components:

Solvent naphtha (petroleum), heavy arom.:

Test Type : Maximization Test
Species : Guinea pig
Result : Not a skin sensitizer.

carbosulfan (ISO):

Test Type : Buehler Test
Species : Guinea pig
Method : OECD Test Guideline 406
Result : Not a skin sensitizer.

carbofuran (ISO):

Test Type : Buehler Test
Result : Not a skin sensitizer.

Carcinogenicity

Components:

Solvent naphtha (petroleum), heavy arom.:

Species	:	Rat, male and female
Application Route	:	inhalation (vapor)
Exposure time	:	12 month(s)
	:	1.8 mg/l
Result	:	negative
Remarks	:	Based on data from similar materials
Carcinogenicity - Assessment	:	Not classifiable as a human carcinogen.

carbosulfan (ISO):

Species	:	Mouse
Exposure time	:	2 Years
NOAEL	:	2.5 mg/kg bw/day
Result	:	negative
Species	:	Rat
Exposure time	:	2 Years
NOAEL	:	1 mg/kg bw/day
Result	:	negative
Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

carbofuran (ISO):

Carcinogenicity - Assessment	:	Weight of evidence does not support classification as a carcinogen

Germ cell mutagenicity

Components:

Solvent naphtha (petroleum), heavy arom.:

Genotoxicity in vitro	:	Test Type: reverse mutation assay Method: OECD Test Guideline 471 Result: negative Remarks: Based on data from similar materials
Genotoxicity in vivo	:	Test Type: Bone marrow chromosome aberration Species: Rat Application Route: inhalation (vapor) Result: negative

carbosulfan (ISO):

Genotoxicity in vitro	:	Test Type: reverse mutation assay

Test system: Salmonella typhimurium
Result: negative

Test Type: reverse mutation assay
Test system: Escherichia coli
Result: negative

Test Type: gene mutation test
Test system: Chinese hamster cells
Result: negative

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster cells
Result: negative

Genotoxicity in vivo : Test Type: chromosome aberration assay
Species: mice
Result: negative

Tristyrylphenol ethoxylates:

Genotoxicity in vitro : Test Type: reverse mutation assay
Method: OECD Test Guideline 471
Result: negative

Genotoxicity in vivo : Remarks: No data available

carbofuran (ISO):

Genotoxicity in vitro : Test Type: Mouse lymphoma assay
Metabolic activation: with and without metabolic activation
Result: positive

Genotoxicity in vivo : Test Type: chromosome aberration assay
Species: Mouse
Result: negative

Test Type: Micronucleus test
Species: Mouse
Result: negative

Reproductive toxicity

Components:

carbosulfan (ISO):

Effects on fertility : Test Type: Three-generation study
Species: Rat
Application Route: Oral
General Toxicity Parent: NOAEL: 1.2 mg/kg bw/day
Fertility: NOAEL: 1.2 mg/kg bw/day
Result: negative

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

Species: Rat
Application Route: Oral
General Toxicity Maternal: NOAEL: 2 mg/kg bw/day
Developmental Toxicity: NOAEL: 2
Result: negative

Test Type: Embryo-fetal development
Species: Rabbit
Application Route: Oral
General Toxicity Maternal: NOAEL: 5 mg/kg bw/day
Developmental Toxicity: NOAEL: 10
Result: negative

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

carbofuran (ISO):

Reproductive toxicity - Assessment : Weight of evidence does not support classification for reproductive toxicity

STOT-single exposure

Components:

carbosulfan (ISO):

Target Organs : Nervous system, Bladder, Gastro-intestinal system, Blood
Assessment : The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

STOT-repeated exposure

Components:

carbosulfan (ISO):

Target Organs : Nervous system, Bladder, Gastro-intestinal system, Blood
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

Repeated dose toxicity

Components:

Solvent naphtha (petroleum), heavy arom.:

Species : Rat, male and female
: 0.9 - 1.8 mg/l
Application Route : inhalation (vapor)
Exposure time : 12 months

carbosulfan (ISO):

Species : Rat
NOAEL : 2 mg/kg bw/day
Application Route : Oral

Exposure time	:	90 days
Species	:	Dog
NOAEL	:	1.6 mg/kg bw/day
Application Route	:	Oral
Exposure time	:	6 months

Aspiration toxicity

Product:

No aspiration toxicity classification

Components:

Solvent naphtha (petroleum), heavy arom.:

May be fatal if swallowed and enters airways.

carbosulfan (ISO):

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

carbofuran (ISO):

No data available

Experience with human exposure

Components:

Solvent naphtha (petroleum), heavy arom.:

Skin contact	:	Symptoms: Repeated exposure may cause skin dryness or cracking.

Toxicology, Metabolism, Distribution

No data available

Neurological effects

No data available

Further information

Product:

Remarks	:	No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Solvent naphtha (petroleum), heavy arom.:

Toxicity to fish	:	LL50 (Oncorhynchus mykiss (rainbow trout)): 2 - 5 mg/l

Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): 1.4 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (green algae)): 1 - 3 mg/l
Exposure time: 24 h
Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EL50 (Daphnia magna (Water flea)): 0.89 mg/l
Exposure time: 21 d
Method: OECD Test Guideline 211

Toxicity to microorganisms : LL50 (Tetrahymena pyriformis): 677.9 mg/l
Exposure time: 72 h
Test Type: Growth inhibition

carbosulfan (ISO):

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.015 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.0015 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Pseudokirchneriella subcapitata (microalgae)): > 20 mg/l
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to fish (Chronic toxicity) : NOEC (Pimephales promelas (fathead minnow)): 0.00828 mg/l
Exposure time: 21 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.0032 mg/l
Exposure time: 21 d

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to terrestrial organisms : (Apis mellifera (bees)): 1.035 µg/bee
Remarks: Oral

(Apis mellifera (bees)): 0.18 µg/bee
Remarks: Contact

LD50 (Anas platyrhynchos (Mallard duck)): 10 mg/kg

Tristyrylphenol ethoxylates:

Toxicity to fish	:	LC50 (Brachydanio rerio (zebrafish)): 21 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Toxicity to microorganisms	:	Remarks: No data available

carbofuran (ISO):

Toxicity to fish	:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 0.18 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 0.0094 mg/l Exposure time: 48 h
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 19 mg/l Exposure time: 72 h
M-Factor (Acute aquatic toxicity)	:	100
Toxicity to fish (Chronic toxicity)	:	NOEC (Oncorhynchus mykiss (rainbow trout)): 0.022 mg/l Exposure time: 21 d
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC (Daphnia magna (Water flea)): 0.008 mg/l Exposure time: 21 d
M-Factor (Chronic aquatic toxicity)	:	10

Persistence and degradability

Components:

Solvent naphtha (petroleum), heavy arom.:

Biodegradability	:	Result: Inherently biodegradable. Biodegradation: 58.6 % Exposure time: 28 d Method: OECD Test Guideline 301F Remarks: Based on data from similar materials

carbosulfan (ISO):

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 28 % Exposure time: 28 d
Stability in water	:	Remarks: Hydrolyzes readily.

Tristyrylphenol ethoxylates:

Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 8 %

Exposure time: 28 d
Method: OECD Test Guideline 301

carbofuran (ISO):

Biodegradability : Result: Not readily biodegradable.

Stability in water : Remarks: Does not readily hydrolyze

Bioaccumulative potential

Components:

Solvent naphtha (petroleum), heavy arom.:

Partition coefficient: n-octanol/water : log Pow: 3.72
Method: QSAR

carbosulfan (ISO):

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 990
Remarks: Can accumulate in aquatic organisms.

Partition coefficient: n-octanol/water : log Pow: 7.42

Tristyrylphenol ethoxylates:

Partition coefficient: n-octanol/water : Remarks: No data available

carbofuran (ISO):

Bioaccumulation : Bioconcentration factor (BCF): 11

Partition coefficient: n-octanol/water : Remarks: No data available

Mobility in soil

Components:

carbosulfan (ISO):

Distribution among environmental compartments : Remarks: immobile

carbofuran (ISO):

Distribution among environmental compartments : Koc: 17 - 28 ml/g
Remarks: Highly mobile in soils

Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

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 chemical 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.

Disposal precautions

Dispose of contents and container according to wastes control act.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

UN number	:	UN 2992
Proper shipping name	:	CARBAMATE PESTICIDE, LIQUID, TOXIC (Carbosulfan, Carbofuran)
Class	:	6.1
Packing group	:	III
Labels	:	6.1

IATA-DGR

UN/ID No.	:	UN 2992
Proper shipping name	:	Carbamate pesticide, liquid, toxic (Carbosulfan, Carbofuran)
Class	:	6.1
Packing group	:	III
Labels	:	Toxic
Packing instruction (cargo aircraft)	:	663
Packing instruction (passenger aircraft)	:	655
Environmentally hazardous	:	yes

IMDG-Code

UN number	:	UN 2992
Proper shipping name	:	CARBAMATE PESTICIDE, LIQUID, TOXIC (Carbosulfan, Carbofuran)
Class	:	6.1
Packing group	:	III
Labels	:	6.1
EmS Code	:	F-A, S-A

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

Refer to section 15 for specific national regulation.

Special precautions for user

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.

15. REGULATORY INFORMATION

National regulatory information

Regulation under the Occupational Safety and Health Act

Harmful Substances Prohibited from Manufacturing

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Harmful Agents to be kept below Occupational Exposure Limits

Chemical name	CAS-No.
Carbofuran	1563-66-2

Harmful Agents Required to be kept below Permission Levels

Not applicable

Hazardous substances requiring management

Not applicable

Special Management Materials

Not applicable

Controlled Substances Subject to Environment Monitoring

Not applicable

Controlled Substances Subject to Health Examination

Not applicable

Regulation under the Chemicals Control Act

Toxic Chemicals

Chemical name	CAS-No.	NIER No.	Threshold limits (%)
Carbosulfan	55285-14-8	97-1-253	>= 1 %

Restricted Chemicals

Not applicable

Prohibited Chemicals

Not applicable

Toxic Release Inventory

Chemical name	CAS-No.	Group	Threshold limits (%)
Carbosulfan	55285-14-8	Group II	>= 1 %

Accident Precaution Chemicals

Not applicable

Dangerous Substances Safety Management Act

Not Applicable to Dangerous Materials

Waste Control Act

Industrial waste
Follow article 13 of the act to dispose the product waste

Other requirements in domestic and other countries

Rotterdam Convention (Prior Informed Consent) : carbofuran (ISO)

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.

2,3-DIHYDRO-2,2-DIMETHYLBENZOFURAN-7-YL (DIBUTYLAMINTHIO)METHYLCARBAMATE

Ethanol, 2,2',2''-nitrilotris-, compd. with .alpha.-[2,4,6-tris(1-phenylethyl)phenyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl) phosphate

ENCS : Not in compliance with the inventory

ISHL : Not in compliance with the inventory

KECI : On the inventory, or 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

16. OTHER INFORMATION

Issuing date	:	2022/02/28

Revision number and date

Number of Revision	:	1.0
Revision Date	:	2022/02/28
Date format	:	yyyy/mm/dd

Full text of other abbreviations

ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	:	ACGIH - Biological Exposure Indices (BEI)
KR OEL	:	Harmful Agents to be kept below Occupational Exposure Limits
ACGIH / TWA	:	8-hour, time-weighted average
KR OEL / TWA	:	Time Weighted Average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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 - 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System

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