

SAFETY DATA SHEET CORTEVA AGRISCIENCE CANADA COMPANY

Product name: Prospect Herbicide Issue Date: 12/17/2020

CORTEVA AGRISCIENCE CANADA COMPANY encourages you and expects you to read and understand the entire SDS as there is important information throughout the document. This SDS provides users with information relating to the protection of human health and safety at the workplace, protection of the environment and supports emergency response. Product users and applicators should primarily refer to the product label attached to or accompanying the product container.

1. IDENTIFICATION

Product name: Prospect Herbicide

Recommended use of the chemical and restrictions on use

Identified uses: End use herbicide product

COMPANY IDENTIFICATION

CORTEVA AGRISCIENCE CANADA COMPANY #2450, 215 - 2ND STREET S.W. CALGARY AB, T2P 1M4

CANADA

Customer Information Number: 800-667-3852

E-mail address : solutions@corteva.com

EMERGENCY TELEPHONE

2. HAZARDS IDENTIFICATION

Hazard classification

This product is not hazardous under the criteria of the Hazardous Products Regulation (HPR) as implemented under the Workplace Hazardous Materials Information System (WHMIS 2015).

Other hazards

No data available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CASRN	Concentration
Halauxifen-methyl	943831-98-9	1.68%
Carfentrazone-ethyl	128639-02-1	3.22%

Ethylhexanol 104-76-7 >= 1.0 - < 3.0 %

Methanol 67-56-1 >= 0.3 - < 1.0 %

Balance Not available > 90.0 %

4. FIRST AID MEASURES

Description of first aid measures

General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin contact: Wash off with plenty of water.

Ingestion: No emergency medical treatment necessary.

Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray Alcohol-resistant foam

Unsuitable extinguishing media: None known.

Special hazards arising from the substance or mixture

Hazardous combustion products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Exposure to combustion products may be a hazard to health. Do not allow run-off from fire fighting to enter drains or water courses.

Advice for firefighters

Fire Fighting Procedures: 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.

Remove undamaged containers from fire area if it is safe to do so. Evacuate area. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary. Use personal protective equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation. Use personal protective equipment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions: If the product contaminates rivers and lakes or drains inform respective authorities. Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up: Clean up remaining materials from spill with suitable absorbant. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to overpressurization of the container. Keep in suitable, closed containers for disposal. Wipe up with absorbent material (e.g. cloth, fleece). Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). See Section 13, Disposal Considerations, for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling: Do not breathe vapours/dust. Do not smoke. Handle in accordance with good industrial hygiene and safety practice. Smoking, eating and drinking should be prohibited in the application area. Take care to prevent spills, waste and minimize release to the environment. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Conditions for safe storage: Store in a closed container. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in properly labelled containers. Store in accordance with the particular national regulations.

Do not store with the following product types: Do not store near acids.. Strong oxidizing agents. Unsuitable materials for containers: None known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Consult local authorities for recommended exposure limits.

Component	Regulation	Type of listing	Value/Notation
Carfentrazone-ethyl	ACGIH	TWA Inhalable	1 mg/m3
		particulate matter	
Ethylhexanol	Corteva OEL	TWA	2 ppm SKIN
Methanol	ACGIH	TWA	200 ppm
	ACGIH	STEL	250 ppm
	ACGIH	TWA	SKIN, BEI
	ACGIH	STEL	SKIN, BEI
	CA AB OEL	TWA	262 mg/m3 200 ppm
	CA AB OEL	STEL	328 mg/m3 250 ppm
	CA AB OEL	TWA	SKIN
	CA BC OEL	TWA	200 ppm
	CA AB OEL	STEL	SKIN
	CA BC OEL	TWA	SKIN
	CA BC OEL	STEL	250 ppm
	CA QC OEL	TWAEV	262 mg/m3 200 ppm
	CA BC OEL	STEL	SKIN
	CA ON OEL	TWAEV	SKIN
	CA QC OEL	STEV	328 mg/m3 250 ppm
	CA ON OEL	STEV	SKIN
	CA QC OEL	TWAEV	SKIN
	CA QC OEL	STEV	SKIN
	ACGIH	TWA	SKIN, BEI
	ACGIH	STEL	SKIN, BEI

RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.

Biological occupational exposure limits

Components	CAS-No.	Control		Sampling	Permissible	Basis
		parameters		time	concentration	
Methanol	67-56-1	Methanol	Urine	End of	15 mg/l	ACGIH
				shift (As		BEI
			soon as			
			possible			
			after			
			exposure			
			ceases)			

Exposure controls

Engineering controls: Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Eye/face protection: Use safety glasses (with side shields).

Skin protection

Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be

Other protection: No precautions other than clean body-covering clothing should be needed.

Respiratory protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, wear respiratory protection when adverse effects, such as respiratory irritation or discomfort have been experienced, or where indicated by your risk assessment process. For most conditions no respiratory protection should be needed; however, if discomfort is experienced, use an approved air-purifying respirator.

The following should be effective types of air-purifying respirators: Particulate filter.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state Liquid Color yellow Odor mild

Odor Threshold No data available

4.69 Hq

Melting point/range Not applicable Freezing point No data available Boiling point (760 mmHg) No data available Flash point closed cup > 100 °C **Evaporation Rate (Butyl Acetate** No data available

= 1)

Flammability (solid, gas) Not Applicable Lower explosion limit No data available **Upper explosion limit** No data available **Vapor Pressure** No data available Relative Vapor Density (air = 1) No data available Relative Density (water = 1) No data available Water solubility No data available Partition coefficient: n-No data available

octanol/water

Auto-ignition temperature No data available **Decomposition temperature** No data available Product name: Prospect Herbicide

Dynamic Viscosity 11.0 mPa.s at 20 °C 6.6 mPa.s at 40 °C

Kinematic Viscosity

No data available

Explosive properties

No data available

Oxidizing properties No significant increase (>5C) in temperature.

Liquid Density 0.9281 g/mL at 20 °C **Molecular weight** No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: No decomposition if stored and applied as directed. Stable under normal conditions.

Possibility of hazardous reactions: None known.

No hazards to be specially mentioned.

Conditions to avoid: None known.

Incompatible materials: None.

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Carbon monoxide Carbon dioxide (CO2)

11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

Acute toxicity

Acute oral toxicity

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts.

As product:

LD50, Rat, female, > 2,000 mg/kg No deaths occurred at this concentration.

Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product:

LD50, Rat, female, > 2,000 mg/kg No deaths occurred at this concentration.

Acute inhalation toxicity

No adverse effects are anticipated from single exposure to mist.

As product:

LC50, Rat, male and female, 4 Hour, dust/mist, > 5.76 mg/l No deaths occurred at this concentration.

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Skin corrosion/irritation

Essentially nonirritating to skin.

Serious eye damage/eye irritation

May cause slight temporary eye irritation.

Sensitization

For skin sensitization:

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

For the active ingredient(s):

In animals, effects have been reported on the following organs:

Kidney

Liver

thyroid

For the minor component(s):

In animals, effects have been reported on the following organs:

Blood

Kidney

Liver

spleen

Carcinogenicity

For the active ingredient(s): Did not cause cancer in laboratory animals.

Teratogenicity

For the active ingredient(s): Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

For the minor component(s): Has caused birth defects in laboratory animals only at doses toxic to the mother. Has been toxic to the fetus in laboratory animals at doses toxic to the mother. These concentrations exceed relevant human dose levels.

Reproductive toxicity

For the active ingredient(s): In animal studies, did not interfere with reproduction.

Mutagenicity

For the active ingredient(s): In vitro genetic toxicity studies were negative.

Aspiration Hazard

May be harmful if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

Toxicity

Halauxifen-methyl

Acute toxicity to fish

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50, Rainbow trout (Oncorhynchus mykiss), static test, 96 Hour, 2.01 mg/l

LC50, Pimephales promelas (fathead minnow), 96 Hour, > 3.22 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, 2.12 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants

The EC50 value is above the water solubility.

ErC50, Pseudokirchneriella subcapitata (green algae), 96 Hour, > 3.0 mg/l

ErC50, Myriophyllum spicatum, 14 d, Growth rate inhibition, 0.000393 mg/l

Toxicity to bacteria

EC50, activated sludge, 1 d, > 981 mg/l

Chronic toxicity to fish

NOEC, Pimephales promelas (fathead minnow), flow-through test, Other, 0.259 mg/l

NOEC, Cyprinodon variegatus (sheepshead minnow), flow-through test, 36 d, 0.00272 mg/l

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, number of offspring, 0.484 mg/l

Toxicity to Above Ground Organisms

Material is practically non-toxic to birds on an acute basis (LD50 > 2000 mg/kg). Material is practically non-toxic to birds on a dietary basis (LC50 > 5000 ppm). dietary LC50, Colinus virginianus (Bobwhite quail), 5 d, > 5,620 ppm dietary LC50, Anas platyrhynchos (Mallard duck), 5 d, > 5,620 ppm oral LD50, Colinus virginianus (Bobwhite quail), mortality, > 2250mg/kg bodyweight. contact LD50, Apis mellifera (bees), 48 Hour, mortality, > 98.1µg/bee oral LD50, Apis mellifera (bees), 48 Hour, mortality, > 108µg/bee

Toxicity to soil-dwelling organisms

LC50, Eisenia fetida (earthworms), 14 d, mortality, > 1,000 mg/kg

Carfentrazone-ethyl

Acute toxicity to fish

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 1.6 mg/l

LC50, Lepomis macrochirus (Bluegill sunfish), 96 Hour, 2 mg/l

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 9.8 mg/l

Acute toxicity to algae/aquatic plants

EC50, Anabaena flos-aquae (cyanobacterium), 72 Hour, 0.012 mg/l NOEC, Lemna gibba (gibbous duckweed), 14 d, 0.0057 mg/l

Chronic toxicity to fish

NOEC, Oncorhynchus mykiss (rainbow trout), 21 d, 0.11 mg/l

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), 21 d, 0.22 mg/l

Ethylhexanol

Acute toxicity to fish

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 32 - 37 mg/l

LC50, Fathead minnow (Pimephales promelas), 96 Hour, 28.2 mg/l, OECD Test Guideline 203

Acute toxicity to aquatic invertebrates

LC50, Daphnia magna (Water flea), 48 Hour, 35.2 mg/l, OECD Test Guideline 202

EC50, Daphnia magna (Water flea), 48 Hour, 39 mg/l, OECD Test Guideline 202 or Equivalent

Acute toxicity to algae/aquatic plants

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Growth rate inhibition, 11.5 mg/l, OECD Test Guideline 201 or Equivalent

Toxicity to bacteria

EC50, Bacteria, 16 Hour, 256 - 320 mg/l

Methanol

Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 19,000 mg/l, Method Not Specified.

Acute toxicity to aquatic invertebrates

LC50, Daphnia magna (Water flea), 24 Hour, > 10,000 mg/l, Method Not Specified.

Toxicity to bacteria

IC50, activated sludge, 3 Hour, > 1,000 mg/l

Balance

Acute toxicity to fish

No relevant data found.

Persistence and degradability

Halauxifen-methyl

Biodegradability: For similar active ingredient(s). Halauxifen. Material is expected to biodegrade very slowly (in the environment). Fails to pass OECD/EEC tests for ready biodegradability.

10-day Window: Not applicable **Biodegradation:** 7.7 %

Exposure time: 28 d

Method: OECD Test Guideline 310 or Equivalent

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Carfentrazone-ethyl

Biodegradability: Readily biodegradable

Ethylhexanol

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

biodegradability. Material is ultimately biodegradable (reaches > 70% mineralization in OECD test(s)

for inherent biodegradability). 10-day Window: Not applicable Biodegradation: > 95 % Exposure time: 5 d

Method: OECD Test Guideline 302B or Equivalent

10-day Window: Pass **Biodegradation:** 68 % **Exposure time:** 17 d

Method: OECD Test Guideline 301B or Equivalent

Theoretical Oxygen Demand: 2.95 mg/mg

Chemical Oxygen Demand: 2.70 mg/mg

Biological oxygen demand (BOD)

Incubation Time	BOD
5 d	26 - 70 %
10 d	75 - 81 %
20 d	86 - 87 %

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitization: OH radicals
Atmospheric half-life: 9.7 Hour

Method: Estimated.

Methanol

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

biodegradability. 10-day Window: Pass Biodegradation: 99 % Exposure time: 28 d

Method: OECD Test Guideline 301D or Equivalent

Theoretical Oxygen Demand: 1.50 mg/mg

Chemical Oxygen Demand: 1.49 mg/mg Dichromate

Biological oxygen demand (BOD)

Incubation Time	BOD
5 d	72 %
20 d	79 %

Photodegradation

Test Type: Half-life (indirect photolysis)

Sensitization: OH radicals **Atmospheric half-life:** 8 - 18 d

Method: Estimated.

Balance

Biodegradability: No relevant data found.

Bioaccumulative potential

Halauxifen-methyl

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient: n-octanol/water(log Pow): 3.76

Bioconcentration factor (BCF): 233 Lepomis macrochirus (Bluegill sunfish) 42 d

Carfentrazone-ethyl

Partition coefficient: n-octanol/water(log Pow): 3.36

Bioconcentration factor (BCF): 176

Ethylhexanol

Bioaccumulation: Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow

between 3 and 5).

Partition coefficient: n-octanol/water(log Pow): 3.1 Measured

Methanol

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): -0.77 Measured

Bioconcentration factor (BCF): < 10 Fish Measured

Balance

Bioaccumulation: No relevant data found.

Mobility in soil

Halauxifen-methyl

Expected to be relatively immobile in soil (Koc > 5000).

Partition coefficient (Koc): 5684

Ethylhexanol

Potential for mobility in soil is low (Koc between 500 and 2000).

Partition coefficient (Koc): 800 Estimated.

Methanol

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient (Koc): 0.44 Estimated.

Balance

No relevant data found.

13. DISPOSAL CONSIDERATIONS

Disposal methods: If wastes and/or containers cannot be disposed of according to the product label directions, disposal of this material must be in accordance with your local or area regulatory authorities. This information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. If the material as supplied becomes a waste, follow all applicable regional, national and local laws.

14. TRANSPORT INFORMATION

TDG

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.(Halauxifen-methyl)

UN number UN 3082

Class 9 Packing group III

Marine pollutant Halauxifen-methyl

Classification for SEA transport (IMO-IMDG):

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S.(Halauxifen-methyl)

UN number UN 3082

Class 9
Packing group III

Marine pollutant Halauxifen-methyl

Transport in bulk Consult IMO regulations before transporting ocean bulk

according to Annex I or II of MARPOL 73/78 and the

IBC or IGC Code

Classification for AIR transport (IATA/ICAO):

Proper shipping name Environmentally hazardous substance, liquid,

n.o.s.(Halauxifen-methyl)

UN number UN 3082

Class 9
Packing group III

Further information:

Marine Pollutants assigned UN number 3077 and 3082 in single or combination packaging containing a net quantity per single or inner packaging of 5 L or less for liquids or having a net mass per single or inner packaging of 5 KG or less for solids may be transported as non-dangerous goods as provided in section 2.10.2.7 of IMDG code, IATA special provision A197, and ADR/RID special provision 375.

NOT REGULATED PER TDG EXEMPTION 1.45.1 FOR ROAD OR RAIL

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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15. REGULATORY INFORMATION

National Fire Code of Canada

Not applicable

Canadian Domestic Substances List (DSL)

This product contains chemical substance(s) exempt from CEPA DSL Inventory requirements. It is regulated as a pesticide subject to Pest Control Products Act (PCPA) requirements.

Pest Control Products Act

Pest Control Products Act (PCPA) Registration Number: 33635

Read the PCPA label, authorized under the Pest Control Products Act, prior to using or handling this pest control product.

This chemical is a pest control product registered by Health Canada Pest Management Regulatory Agency and is subject to certain labelling requirements under the Pest Control Products Act (PCPA). There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label. These requirements differ from the classification criteria and hazard information required for GHS-consistent safety data sheets. Following is the hazard information required on the pest control products label:

PCPA Label Hazard Communications:

Read the label and booklet before using. Keep out of reach of children.

Allergens Contained in the Pest Control Product: Warning, contains the allergen soy

This product is toxic to: Aquatic organisms

Non-target terrestrial plants

16. OTHER INFORMATION

Revision

Identification Number: 97067507 / Issue Date: 12/17/2020 / Version: 4.0

DAS Code: GF-3758

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

Legend

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	ACGIH - Biological Exposure Indices (BEI)
CA AB OEL	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	Canada. British Columbia OEL
CA ON OEL	Canada. Ontario OELs
CA QC OEL	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1:
	Permissible exposure values for airborne contaminants
Corteva OEL	Corteva Occupational Exposure Limit
SKIN	Absorbed via skin
SKIN, BEI	Absorbed via Skin, Biological Exposure Indice
STEL	15-minute occupational exposure limit
STEV	short-term exposure value
TWA	8-hour time weighted average
TWAEV	time-weighted average exposure value

Full text of other abbreviations

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

Information Source and References

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

CORTEVA AGRISCIENCE CANADA COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

CA