City of Santa Barbara
MATERIAL EXEMPTION REQUEST FOR PESTICIDE APPLICATION

Dept: Parks Department IPM Coordinator: Jazmin LeBlanc Phone: 805.564.5513

Pesticide Applicator (employee or company) Name: Santa Barbara Pest Control Phone: 805.563.8888

Application Site: Moreton Bay Fig – Train Station Specific: Location: Underneath the tree's dripline

Date(s): Three treatements (3x) between August 2022 – June 2023

Product Name: Subdue Max Fungicide Active Ingredient: Mefanoxam

Number of Applications: ❑ One-time ❑ Other _____

- Type: ❑ Emergency ❑ Trial Programmatic ☑ Other _____

Product type: Herbicide ☐ Insecticide ☑ Fungicide ❑ Other _____

Application: ❑ Ornamental Turf ❑ Golf ☐ Vector Control ☑ Park Tree ❑ Street Tree

❑ Right of Way ❑ Vertebrate pest ❑ Other _____

Is the pesticide on the *Tiered Materials List*? ❑ No Yes ❑ If yes, provide the Tier _____

If the pesticide is not on the *Tiered Materials List*, provide the following screening information. See the IPM Strategy and the *Tiered Materials List* for instructions on screening the pesticide.

EPA Reg # 100-796 Signal _____ Estimated Tier _____

Restricted ❑ No ❑ Yes/Describe _____

P Waste _____ PBT _____ WA PBT _____ Persistant _____ Mobil _____

Cancer _____ Repro _____ Neuro _____ Endocrine _____

Bird _____ Fish _____ Bees _____ Wildlife _____

☒ Attach product label and MSDS to this form.

Describe the pest problem.
The tree has for many years tested positive for the presence of Phytopthora spp. – it causes fibrous root death, leading to canopy decline.

Describe the management goals and objectives for this site.
Staff is developing a long-term programmatic strategy to apply the fungicide at key intervals annually to suppress the presence of the pathogen.

In addition to use of the fungicide, staff have been actively mulching the site to maintain a minimum of 4" organic wood chip mulch. This also includes allowing all debris generated from the tree to accumulate under the dripline. The long-term accumulation of organic materials will encourage more nutrient cycling and improve mycorrhizal potential to assist in maintain and improving the tree's vigor.

What is the damage threshold for this pest at this site?
Minimal, the tree is highly valued and loss of the tree would be a significant loss to the community.

Describe the monitoring of the pest and potential predators that was conducted and the control methods previously used at the site.
Staff are planning another round of both soil and tissue samples this summer to confirm presence of the pathogen. If no active presence of Phytophthora sp. is found staff will re-evaluate whether treatment is warranted. We fully expect to find it present in the soil since it is a soil born water mold.

Describe how the product would be applied including frequency, concentration, and method of application.
The material is applied via soil drench. The programmatic use exemption would allow staff to administer a treatment in the fall before the rainy season, a spring treatment after the rainy season, and a final summer treatment to continue to suppress the presence of the pathogen.

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What non-target impacts are anticipated?
There are no non-target impacts associated with the proposed application.

How does the use of this product help achieve the site management goals? Note if this is curative or preventative.
The use of this product will help achieve site goals by helping to suppress the presence of an existing known fungal pathogen. The application of this material is both curative and preventative.

How will the effectiveness of this product be monitored? Include expected results and indicators of success.
Staff will monitor the overall health of the tree through visual inspections. In addition, we plan to continue to test both roots and soil for the presence of Phytopthora.

Describe site conditions, for example consider the following: restricted access, distance from a creek or body of water, degree of runoff, site is a pesticide-free zone, etc.
The site is located directly under the dripline of the tree. The proposed method of application is soil drench so we anticipate no runoff, or any related issues with bodies of water of any type**.**

List alternatives considered, alternatives implemented and why they were eliminated.
There exists no functional alternatives for effective suppression of Phytopthora spp.

Justification: describe why is applying this pesticide is the best solution and why a less-hazardous chemical, non-chemical option or taking no action is not feasible.
The proposed material is a confirmed effective method in suppressing the presence of Phytopthora. There exist no other effective means to control the pathogen. There are other products of similar design, but we have received multiple recommends for this specific trade name product.

Was outside expertise utilized? ❑ No ❑ Yes / Describe
During the development of this strategy, we reviewed our approach with both Dr. Jim Downer, Ventura County Extension Agricultural Advisor, and Bruce Craig, owner of Santa Barbara Pest Control.

Describe future plans to prevent using the chemical again.
If the programmatic use of the proposed material proves successful, staff may be able to eliminate future use of the product. The pathogen is a naturally occurring water mold, and it may be difficult to eliminate its presence, it may be possible to reduce the frequency of treatment over time.

Signatures_____ _____
Department IPM Coordinator **City IPM Coordinator**

Completed by the City of Santa Barbara Staff IPM Committee

Vote Tally ____ Disposition: ❑ Approved ❑ Denied/Reason _____

If approved, follow the attached best management practices.

Comments:

Completed by the IPM Advisory Committee

Vote Tally ____ Disposition: ❑ Approved ❑ Denied/Reason _____

If approved, follow the attached best management practices.

Comments:

SECTION 1: PRODUCT INFORMATION

Product Identifier: SUBDUE MAXX®
Formulation Number: A9619C
Registration Number: 27055 (Pest Control Products Act)
Product Use: Fungicide. Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

Syngenta Canada Inc.
140 Research Lane, Research Park
Guelph, ON N1G 4Z3

SDS prepared by: Department of Regulatory & Biological Assessment, Syngenta Canada Inc.
For further information, contact: 1-87-SYNGENTA (1-877-964-3682)

In Case of Emergency, Call: 1-800-327-8633 (FAST MED)

SECTION 2: HAZARDS IDENTIFICATION

Classification in accordance with UN GHS Version 5.

Hazard Classification(s): Eye Irritation – Category 2A

Hazard Symbol(s):

Signal Word: WARNING

Hazard Statement(s): H319 – Causes serious eye irritation.

Precautionary Statement(s):

- **Prevention:** P264 – Wash thoroughly after handling.
  P280 – Wear eye protection/face protection.
- **Response:** P305+P351+P318 – 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.
- **Storage:** Not applicable.
- **Disposal:** Not applicable.

Other Hazards Which do not Result in GHS Classification: To avoid risk to human health and the environment, comply with the instructions for use.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Common Name	CAS Number	Average % by weight
Methyl-N-(2,6-dimethylphenyl)-N-(methoxyacetyl)-D-alaninate	Metalaxyl-M & S-isomer	70630-17-0	21.7

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

SECTION 4: FIRST AID MEASURES

IF POISONING IS SUSPECTED, immediately contact the poison information centre, doctor or nearest hospital. Have the product container, label or Safety Data Sheet with you when calling Syngenta, a poison control centre or doctor, or going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given. Call the Syngenta Emergency Line [**1-800-327-8633 (1-800-FASTMED**)], for further information.

Eye Contact: Flush eyes with clean water, holding eyelids apart for a minimum of 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eyes. Call Syngenta, a poison control centre or doctor for treatment advice. Obtain medical attention immediately if irritation persists.
Skin Contact: Immediately remove contaminated clothing and wash skin, hair and fingernails thoroughly with soap and water. Flush skin with running water for a minimum of 15-20 minutes. Call Syngenta, a poison control centre or doctor for treatment advice.
Inhalation: Move victim to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth to mouth, if possible. Call Syngenta, a poison control centre or doctor for treatment advice.
Ingestion: If swallowed, immediately contact Syngenta, a poison control centre, doctor or nearest hospital for treatment advice. Have person sip a glass of water if able to do so. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless directed by a physician or a poison control centre. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer water.

Most Important Symptoms/Effects, Acute and Delayed:
Causes serious eye irritation.
May cause mild skin irritation.

Indication of Immediate Medical Attention and Special Treatment:
There is no specific antidote.
Treat symptomatically.
Contact with eyes may require specialized ophthalmologic examination.

SECTION 5: FIRE FIGHTING MEASURES

Suitable (and Unsuitable) Extinguishing Media: Use foam, carbon dioxide, dry powder, halon extinguishant or water fog or mist. Cool closed containers exposed to fire with water spray. Do not use a solid water stream as it may scatter and spread the fire.
Specific Hazards Arising from the Product: Can decompose at high temperatures forming toxic gases. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.
Special Protective Equipment and Precautions for Fire-Fighters: Wear full protective clothing and self-contained breathing apparatus. Evacuate non-essential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water run-off can cause environmental damage. Contain run-off water with, for example, temporary earth barriers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Control the spill at its source. Clean up spills immediately, observing precautions outlined in Sections 7 and 8. Use adequate ventilation and equipment and wear clothing as described in Section 8 and/or the product label.
Environmental Precautions: Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Spillages or uncontrolled discharges into watercourses must be reported to the appropriate regulatory body.
Methods and Materials for Containment and Cleaning Up: Pump or scoop large amounts of liquid into a disposable container. Absorb remaining liquid or smaller spills with clay, sand or vermiculite. Scoop or seep up material and place into a disposal container. Wash area with detergent and water. Pick up wash liquid with additional absorbent and place into a compatible disposal container. On soils, small amounts will naturally decompose. For large amounts, skim off the upper contaminated layer and collect for disposal. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling: KEEP OUT OF REACH OF CHILDREN. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Avoid breathing vapours, dust or spray mist. Wear full protective clothing and equipment (see Section 8). After work, rinse gloves and remove protective equipment, and wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, applying cosmetics or using the toilet. Wash contaminated clothing before re-use and separate from household laundry. Keep containers closed when not in use. Protect product, wash or rinse water, and contaminated materials from uncontrolled release into the environment, or from access by animals, birds or unauthorized people.
Conditions for Safe Storage, Including Any Incompatibilities: Store in original container in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose sealed containers to temperatures above 40 °C. Refer to the product label for specific storage recommendations, including minimum storage temperature and freeze/thaw stability. Keep separate from other products to prevent cross contamination. Rotate stock. Clean up spilled material immediately.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

CONSULT THE PRODUCT LABEL FOR COMMERCIAL AND/OR ON-FARM APPLICATIONS.

Control Parameters:

Component	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen	WHMIS†
Metalaxyl-M & S-isomer	Not established	Not established	5 mg/m^3 TWA***	No	Not established

* Recommended by Manufacturer
** Recommended by NIOSH
*** Syngenta Occupational Exposure Limit (OEL)
**** Recommended by AIHA (American Industrial Hygiene Association)
† Material listed in Ingredient Disclosure List under the Hazardous Products Act

Appropriate Engineering Controls: If necessary, ensure work areas have ventilation, containment, and procedures sufficient to maintain airborne levels below the TLV (threshold limit value). Warehouses, production areas, parking lots and waste holding facilities must have adequate containment to prevent environmental contamination. Provide separate shower and eating facilities.

Individual Protection Measures:
General: Avoid breathing dust, vapours or aerosols. Avoid contact with eye, skin and clothing. Wash thoroughly after handling and before eating, drinking, applying cosmetics or handling tobacco.
Ingestion: Do not eat, drink, handle tobacco, or apply cosmetics in areas where there is a potential for exposure to this material. Always wash thoroughly after handling.
Eyes: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower.
Skin: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.
Inhalation: A particulate filter respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH certified respirator with any N, R, P or HE filter. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Honey-yellow coloured liquid.
Formulation Type: Emulsifiable concentrate.
Physical State: Liquid.
Odour: Sweet and waxy.
Odour Threshold: Not available.
pH: 7 – 9 (1% aqueous solution @ 25 °C).
Melting Point: Not applicable.
Freezing Point: 0 °C.
Initial Boiling Point and Boiling Range: Not available.
Flash Point: > 93.3 °C.
Evaporation Rate: Not available.
Flammability (solid/gas): Not applicable.
Lower Explosive Limit: Not applicable.
Upper Explosive Limit: Not applicable.
Vapour Pressure: Metalaxyl-M & S-isomer: 2.50 x 10-5 mmHg @ 20 °C.
Vapour Density: Not available.
Relative Density: 1.10 g/cm3 @ 20 °C.
Solubility(ies): Metalaxyl-M & S-isomer: 26,000 mg/L @ 20 °C, pH 7 (water).
Partition Coefficient (n-octanol water): Metalaxyl-M & S-isomer: 1.7
Auto-Ignition Temperature: Not available.
Decomposition Temperature: Not available.
Viscosity: 216 mPa·s @ 25 °C.

Other Information: Not applicable.

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Not reactive.
Chemical Stability: Stable under normal use and storage conditions.
Possibility of Hazardous Reactions: No hazardous reactions with normal handling and storage according to the label directions.
Conditions to Avoid: Keep away from heat or open flames. Keep product from freezing.
Incompatible Materials: Strong oxidizing materials, such as hydrogen peroxide, bromine, chromic acid, strong bases, strong acids.
Hazardous Decomposition Products: Can decompose at high temperatures forming toxic gases. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Dermal, inhalation, oral.
Symptoms of Acute Exposure: Causes serious eye irritation. May cause mild skin irritation.
Potential Health Effects: Contact with eyes may require specialized ophthalmologic examination.

Acute Toxicity/Irritation Studies (Finished Product):

Ingestion:	Low Acute Toxicity	
	Oral (LD50 Female Rat)	2,695 mg/kg body weight
Dermal:	Low Acute Toxicity	
	Dermal (LD50 Rat)	> 5,050 mg/kg body weight
Inhalation:	Low Acute Toxicity	
	Inhalation (LC50 Rat)	> 2.8 mg/L air – 4 hours
Eye Contact:	Moderately Irritating (Rabbit)	
Skin Contact:	Practically Non-Irritating (Rabbit)	
Skin Sensitization:	Not a Sensitizer (Guinea Pig)	

Specific Target Organ Toxicity (STOT) Single Exposure:
Metalaxyl-M & S-isomer: May cause substantial but temporary eye irritation.

Specific Target Organ Toxicity (STOT) Repeated Exposure:
Metalaxyl-M & S-isomer: No adverse effect has been observed in chronic toxicity tests.

Carcinogenicity:
Metalaxyl-M & S-isomer: Did not show carcinogenic effects in animal experiments.

Reproductive Toxicity:
Metalaxyl-M & S-isomer: Did not show reproductive toxicity effects in animal experiments.

Mutagenicity:
Metalaxyl-M & S-isomer: Did not show mutagenic effects in animal experiments.

Aspiration Hazard:
Metalaxyl-M & S-isomer: Not classified as an aspiration hazard.

Toxicity of Other Components:
The acute toxicity test results reported in Section 11, above, for the finished product take into account any acute hazards related to the "other components" in the formulation.

SECTION 12: ECOLOGICAL INFORMATION

Eco-Acute Toxicity:
Metalaxyl-M & S-isomer:

Invertebrates (Water Flea) 48-hour LC_{50}/EC_{50}	28 ppm
Fish (Rainbow Trout) 96-hour LC_{50}/EC_{50}	130 ppm
Birds (5-day dietary – Bobwhite Quail) LD_{50}	> 5,000 ppm

Persistence & Degradability:
Metalaxyl-M & S-isomer: Moderately persistent in soil. Persistent in water; partitions to sediment.

Bioaccumulation Potential:
Metalaxyl-M & S-isomer: BCF < 500; does not bioaccumulate.

Mobility in Soil:
Metalaxyl-M & S-isomer: Moderate mobility in soil.

Other Adverse Effects: Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods:

Waste from residues:
Refer to the product label for specific disposal/recycling information.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.

Contaminated packaging:
Refer to the product label for specific disposal/recycling information.
Empty remaining contents
Triple rinse containers
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not reuse empty containers.

SECTION 14: TRANSPORT INFORMATION

TDG Classification – Road/Rail:

UN Number:	UN 3082
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Metalaxyl-M & S-isomer).
Transport Hazard Class:	Class 9
Packing Group:	PG III
Environmental Hazards:	Environmentally hazardous.

Remarks:
Class 9 Exemption from Part 3, Documentation, and Part 4, Dangerous Goods Safety Marks, if transported solely on land by road vehicle or railway vehicle. 1.45.1. SOR/2008-34

Water Transport – International (IMDG):

UN Number:	UN 3082
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Metalaxyl-M & S-isomer), Marine Pollutant.
Transport Hazard Class:	Class 9
Packing Group:	PG III
Environmental Hazards:	Marine pollutant.

Air Transport (IATA-DGR):

UN Number:	UN 3082
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Metalaxyl-M & S-isomer).
Transport Hazard Class:	Class 9
Packing Group:	PG III
Environmental Hazards:	Environmentally hazardous.

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.

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:
Not applicable.

SECTION 15: REGULATORY INFORMATION

There are Canada-specific environmental requirements for handling, use and disposal of this pest control product that are indicated on the product label.

Hazardous Products Act Information:
This product has been classified in accordance with the amended Hazardous Products Act and the Hazard Criteria of the Hazardous Products Regulations (HPR), and the SDS contains all the information required by the HPR.

Hazardous Products Act Information: WHMIS 2015 Classification
This product is exempt under WHMIS 2015.

Pest Control Products Act (PCPA) Registration No.: 27055

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). 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 pamphlet before using.
Keep out of reach of children.
Caution: Eye Irritant.

PCPA Hazard on Label:	**Eye Irritant**	**GHS Hazard Classification:**	**Eye Irritation – Category 2A**
PCPA Precautionary Symbol:	Not applicable.	GHS Hazard Symbol:	
PCPA Signal Word(s):	Caution	GHS Signal Word:	Warning
PCPA Hazard Statement:	Not applicable.	GHS Hazard Statement:	H319 – Causes serious eye irritation.

Allergens Contained in the Pest Control Product:
Not applicable (or detail as required).

NPRI Components:
Not applicable.

SECTION 16: OTHER INFORMATION

The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Syngenta will not be liable for any damages, losses, injuries or consequential damages which may result from the use of or reliance on any information contained herein. This product is under the jurisdiction of the Pest Control Products Act and is exempt from the requirements for a WHMIS compliant SDS. Hazardous properties of all ingredients have been considered in the preparation of this SDS. Read the entire SDS for the complete hazard evaluation of this product.

Full Text of Abbreviations:
AB – Province of Alberta
BC – Province of British Columbia
BCF – Bioconcentration factor
EC_{50} – Effective concentration, 50%
GHS – Globally Harmonized System of Classification and Labeling of Chemicals
LC_{50} – Lethal concentration, 50%
LD_{50} – Lethal dose, 50%
IARC – International Agency for Research on Cancer
IATA-DGR – International Air Transport Association Dangerous Goods Regulations
IMDG – International Maritime Code for Dangerous Goods
NTP –National Toxicology Program
ON – Province of Ontario
OSHA – Occupational Safety & Health Administration
PEL – Permissible Exposure Limit
TDG – Transportation of Dangerous Goods
TLV – Threshold Limit Value
QC – Province of Quebec
SDS – Safety Data Sheet
WHMIS – Workplace Hazardous Materials Information System

Changes since last revision: Converted to SDS format.

Revision Date (Y-M-D): 2018-06-27
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Prepared by: Syngenta Canada Inc.
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END OF SAFETY DATA SHEET.