



MATERIAL SAFETY DATA SHEET

Syngenta Crop Protection Canada, Inc.
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**In Case of Emergency, Call
1-800-327-8633 (FAST MED)**

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MSDS prepared by:
Department of Regulatory & Biology Development
Syngenta Crop Protection Canada, Inc.

**For further information contact:
1-866-569-4411**

SECTION – 1: PRODUCT IDENTIFICATION

Product Identifier: FOOTHILLS™ B ADJUVANT LIQUID Formulation No.: C-0742
Registration Number: 29280 (Pest Control Products Act)
Chemical Class: Petroleum Hydrocarbons.

Active Ingredient (%): Petroleum Solvent Blend (83%) CAS No.: Mixture
Chemical Name: Petroleum Hydrocarbons.
Product Use: An adjuvant for use in herbicide tank mixes. Please refer to product label for further details.

SECTION – 2 : COMPOSITION/INFORMATION ON INGREDIENTS

Material	OSHA PEL	ACGIH TLV	Other	NTP/IARC/OSHA Carcinogen	WHMIS†
Petroleum Solvent Blend CAS #'s 64742-65-0 and 64742-94-5 (83%)	Not Established	Not Established	100 ppm*	No	Not Established
Surfactant Blend (17%)	Not Established	Not Established	Not Established	No	Not Established

* Recommended by manufacturer

† Material listed in Ingredient Disclosure List under Hazardous Products Act.

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

SECTION – 3: HAZARDS IDENTIFICATION

Symptoms of Acute Exposure

Ingestion of large doses may cause diarrhoea. The petroleum solvent in this product can cause a chemical pneumonitis if aspirated. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause mild to severe pulmonary injury which may result in laboured breathing, coma and death. Contact with eyes may cause irritation. Prolonged or repeated skin contact may cause irritation and possibly a rash (dermatitis). High vapour concentrations (>1000 ppm) can be irritating to the eyes and the respiratory tract, and cause headaches, dizziness, drowsiness, unconsciousness, and other central nervous system effects, including death.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases, including carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, sulphur oxides.

Physical Properties

Appearance: Light amber (hazy) coloured liquid.
Odour: Mild aromatic hydrocarbon odour.

Unusual Fire, Explosion and Reactivity Hazards

Thermal decomposition products may include, but are not limited to carbon monoxide or carbon dioxide. If heated above the flash point, heavy vapours can flow along surfaces to distant ignition sources and flash back.

Potential Health Effects

Relevant routes of exposure: Skin, eyes, mouth, lungs.

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 Material Safety Data Sheet with you when calling Syngenta, a poison control center 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 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call Syngenta, a poison control center 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 plenty of water for 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. **Do not induce vomiting** unless directed by a physician or a poison control center. Do not give **any** liquid to the person. Call Syngenta, a poison control centre or doctor for treatment advice.

NOTES TO PHYSICIAN:

There is no specific antidote if this product is ingested. Treat symptomatically. Contains petroleum distillate - vomiting may cause aspiration pneumonia.

Induction of emesis is not recommended due to the large amount of petroleum solvent in this product, which could cause chemical pneumonitis if aspirated. If ingested, lavage stomach, taking care to avoid aspiration of stomach contents into the lungs. Check for possible mucosal damage before beginning gastric lavage.

If inhaled, observe for delayed onset of pulmonary edema.
Treat central nervous system effects symptomatically.

MEDICAL CONDITIONS KNOWN TO BE AGGRAVATED: Pre-existing eye, skin and respiratory disorders may be aggravated by exposure to this product. Individuals with chronic respiratory disorders or pre-existing dermatitis should use extra care in handling this product.

SECTION – 5: FIRE FIGHTING MEASURES

Flash point and method: 192 °C (PM CC).

Upper and lower flammable (explosive) limits in air: Not available.

Auto-ignition temperature: Not available.

Flammability: Not applicable.

Hazardous combustion products: Carbon monoxide, carbon dioxide and dense smoke.

Unusual Fire, Explosion and Reactivity Hazards: Combustible liquid. Can release vapours that form explosive mixtures at temperatures at, or above, the flash point. If heated above flash point, heavy vapours can flow along surfaces to distant

ignition sources and flash back. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Conditions under which flammability could occur: This product contains aromatic hydrocarbon. Temperatures above the flash point. Keep fire exposed containers cool by spraying with water.

Extinguishing media: Use foam, carbon dioxide, dry powder, halon extinguishant or water fog or mist, (avoid use of water jet). Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential 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 runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers.

Sensitivity to explosion by mechanical impact: No.

Sensitivity to explosion by static discharge: No.

SECTION – 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Wear suitable protective clothing and eye protection to prevent skin and eye contact. Use adequate ventilation and wear equipment and clothing as described in Section 8 and/or the product label.

Procedures for dealing with release or spill: Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Sections 7 and 8. Pump or scoop large amounts of liquid into a disposable container. Absorb remaining liquid or smaller spills with clay, sand or vermiculite. Scoop or sweep up material and place into a disposal container. Wash area with detergent and water. Pick up wash liquid with additional absorbent and place into 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. Spillages or uncontrolled discharges into watercourses must be reported to the appropriate regulatory authority.

SECTION – 7: HANDLING AND STORAGE

Handling practices: 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 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.

Appropriate storage practices/requirements: Store in original container only in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose sealed containers to temperatures above 40 °C. Keep separate from other products to prevent cross contamination. Rotate stock. Clean up spilled material immediately.

National Fire Code classification: Not required.

SECTION – 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Applicable control measures, including engineering controls: Ensure work areas have ventilation, containment, and procedures sufficient to maintain airborne levels below the TLV. Warehouses, production area, parking lots and waste holding facilities must have adequate containment to prevent environmental contamination. Provide separate shower and eating facilities.

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 APPLICATIONS AND/OR ON-FARM APPLICATIONS.

Personal protective equipment for each exposure route:

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 a safety shower.

SKIN: Where contact is likely, wear chemical-resistant gloves (such as nitrile or butyl), coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

INHALATION: A respirator is not normally required when handling this substance. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH-certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapour cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

SECTION – 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light amber liquid.

Formulation Type: Emulsifiable concentrate.

Odour: Mild aromatic.

pH: 8.2 (4% emulsion in water).

Vapour pressure and reference temperature: Not available.

Vapour density: Not available.

Boiling point: Not available.

Melting point: Not applicable.

Freezing point: -40 °C.

Specific gravity or density: Approx. 0.93 @ 20 °C.

Evaporation Rate: Not available.

Water/oil partition coefficient: Not available.

Odour threshold: Not available.

Viscosity: 12 cps.

Solubility in Water: Not available.

SECTION – 10: STABILITY AND REACTIVITY

Chemical stability: Stable under normal use and storage conditions.

Conditions to avoid: Ignition sources.
Temperatures below -17 °C or above 50 °C.

Incompatibility with other materials: Strong oxidizer agents.

Hazardous decomposition products: Carbon dioxide, carbon monoxide, nitrogen oxides, ammonia, sulphur oxides.

Hazardous polymerization: Will not occur.

SECTION – 11: TOXICOLOGICAL INFORMATION

Acute toxicity/Irritation Studies (Finished Product):

Ingestion:	<u>Practically Non-Toxic</u>	
	Oral (LD50 Rat):	> 10,000 mg/kg body weight
Dermal:	<u>Slightly Toxic</u>	
	Dermal (LD50 Rat):	> 2,000 mg/kg body weight
Inhalation:	<u>Not Available</u>	
	Inhalation (LC50 Rat):	Not Available.
Eye Contact:	<u>Not Available</u>	

Skin Contact: Not Available

Skin Sensitization: Not Available

Reproductive/Developmental Effects

Not Available

Chronic/Subchronic Toxicity Studies

Petroleum Solvent

Respiratory tract, skin and eye irritation. Central nervous system effects.

Surfactant Blend:

Respiratory tract, skin and eye irritant; Central nervous system depression and liver injury.

Carcinogenicity

Not Available

Other Toxicity Information:

This material may irritate human eyes following contact. Frequent or prolonged contact with human skin may irritate the skin and cause a skin rash (dermatitis). Skin contact may aggravate an existing dermatitis condition. This product is not expected to cause sensitization.

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.

Other materials that show synergistic toxic effects together with the product: None known.

Target Organs

Petroleum Solvent Blend

Eyes, Skin, Central Nervous System and Lungs

Surfactant Blend

Skin, Eyes, Respiratory Tract, Central Nervous System and Liver

SECTION – 12: ECOLOGICAL INFORMATION

Summary of Effects

FOOTHILLS B ADJUVANT LIQUID is an adjuvant used as a registered tank-mix partner product. As a petroleum-based product, this adjuvant has the potential to be toxic to aquatic biota. Do not apply this product directly to freshwater habitats, estuaries, or marine habitats. Do not contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes.

Environmental Fate

This product forms an emulsion when mixed with water and is gradually dispersed. The components of this product are not known to be persistent in the environment and are not expected to contaminate groundwater under normal conditions of use. Bulk quantities from spills or accidental release should be cleaned up and properly disposed of to prevent unwanted side effects.

SECTION – 13: DISPOSAL CONSIDERATIONS

Waste disposal information: Do not reuse empty containers unless they are specifically designed to be re-filled.. Empty container retains product residue. Triple rinse, or equivalent, empty container, return rinse water to dilution mixture, and dispose of dilution mixture as a hazardous waste if it cannot be disposed of by use according to label instructions. Dispose of empty containers in accordance with local regulations. Consult provincial environment ministry for advice on waste disposal. Industrial/commercial waste may be handled at licensed facilities only. Waste shipments must be securely packaged and properly labelled. Only licensed carriers may be used, and proper documents must accompany the shipment.

SECTION – 14 : TRANSPORT INFORMATION

Shipping information such as shipping classification:

TRANSPORTATION OF DANGEROUS GOODS CLASSIFICATION - ROAD/RAIL

Not Regulated.

SECTION – 15: REGULATORY INFORMATION

WHMIS classification for product: Exempt

A statement that the MSDS has been prepared to meet WHMIS requirements, except for use of the 16 headings.

This MSDS has been prepared in accordance with WHMIS requirements, but the data are presented under 16 headings.

Other regulations; restrictions and prohibitions

Pest Control Products (PCP) Act Registration No.: 29280

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 Material Safety Data Sheet is valid for three years. This product is under the jurisdiction of the Pest Control Products Act and is exempt from the requirements for a WHMIS compliant MSDS. Hazardous properties of all ingredients have been considered in the preparation of this MSDS. Read the entire MSDS for the complete hazard evaluation of this product.

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