

Material Safety Data Sheet

Turbocharge B Adjuvant

In case of emergency Call CANUTEC at 613 996 6666

1. Product Identification:

Product name: Turbocharge B Adjuvant

Product use: A spray tank adjuvant for use with Achieve 40DG Herbicide, Achieve Liquid Herbicide, Achieve 80DG Herbicide and Marengo¹ Herbicide.

Supplier:

Viterra Inc.

2625 Victoria Avenue
Regina, SK S4T 7T9
1-866-569-4411

Effective date: May 29, 2009

This product is regulated under authority of the Pest Control Products Act

2. Composition:

Component	CAS Number	% (w/w)
Petroleum oil	064741-88-4	50.0
Other ingredients		50.0
Including:		
Surfactant	not available	
Octanol	000123-96-6	

3. Hazard Identification:

Emergency Overview:

This product is a pale yellow liquid with a mild aromatic odor. Contact may cause eye and skin irritation. Inhalation may cause irritation to the respiratory passages.

Potential Health Effects:

Eyes: Exposure may cause eye irritation, redness and pain.

Skin contact: Contact may cause defatting, drying and cracking of the skin.

Skin absorption: This product may be absorbed intact through the skin in harmful amounts.

Ingestion: Amounts that may be ingested in normal industrial handling will not likely cause injury. Ingestion of large amounts may cause nausea, gastrointestinal upset, central nervous system (CNS) depression, peripheral nervous system effects, and damage to the blood forming tissues and accelerated heart rate.

Inhalation: This product is irritating to the nose, throat and respiratory tract if inhaled. Inhalation may also cause CNS and other effects described above.

Skin: Remove contaminated clothing at once and wash the skin with flowing water for 20 minutes. Get medical if irritation occurs.

Ingestion: If swallowed, get medical attention at once. If the individual is conscious, wash out their mouth with water. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless directed by a physician or a poison control center. If spontaneous vomiting occurs, have the individual lean forward with head down to avoid breathing in of vomitus, then rinse out the mouth and administer water.

Inhalation: Remove individual to fresh air. If individual is not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is labored, qualified personnel should give oxygen. Get medical attention at once.

Note to physician:

This product contains a petroleum solvent; small amounts aspirated into the respiratory system during ingestion or vomiting may cause pulmonary injury. There is no specific antidote. Stomach lavage is suggested if a large amount of Turbocharge B has been ingested. Hydrocarbon pneumonitis is a risk if this product is aspirated. Apply artificial respiration if breathing has ceased or shows signs of failing. Employ supportive care. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

4. First Aid Measures:

Eyes: Flush eyes with a gentle stream of flowing water for 20 minutes while holding eyelids open. Remove contact lenses, if present, after the first five minutes, and then continue rinsing eyes. If irritation persists, get medical attention at once.

5. Fire-Fighting Measures:

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Flash point: >100°C (TCC)

Flammable limits: Not available

Auto-ignition temperature: Not available. Treat as a flammable liquid.

Extinguishing media: Foam CO₂, dry chemical or Halon.

Sensitivity to mechanical impact/static discharge: Not available

Unusual fire and explosion hazards: Use water spray to cool fire-exposed containers. Use water spray to disperse vapors. Re-ignition of vapors is possible. Noxious fumes including carbon monoxide, carbon dioxide and, possibly other irritating gases may be formed under fire conditions. Vapors created are heavier than air and can flow along surfaces to distant ignition sources and flash back. Evacuate non-essential personnel from the affected area to prevent human exposure to fire, smoke, fumes or products of combustion. Contain fire-fighting water for future disposal.

Fire-fighting equipment: Wear positive-pressure self-contained breathing apparatus and full turnout gear.

6. Accidental Release Measures:

Eliminate all ignition sources. Ventilate the spill area. Avoid breathing the vapor.

Soak up small spills with absorbent material such as HAZORB, or ZORBALL, peat moss, commercial sweeping compound or similar absorbent material; if these are not available use adsorbing agents such as kitty litter, sand, clay or topsoil. Store collected absorbed/adsorbed material in secure containers until safe disposal can be arranged. Avoid the use of water for cleanup, since spent water must be collected and may be treated as hazardous waste. Use hot water and heavy duty detergent to clean up any residual stains on hard surfaces. Small spills on topsoil should be worked into the soil and allowed to degrade under natural conditions (see Section 13. Ecological Information – Degradation and Metabolism – Soil). Do not allow spilled material to contaminate water supplies. For large spills, dike and barricade the affected area and contact CANUTEC at 613 996 6666 and local authorities.

7. Handling and Storage:

Handling: Keep out of reach of children. Do not get in eyes, on skin or on clothing. Do not swallow. Avoid contact with skin and eyes. Wash immediately with plenty of soap and water. Wash hands and face before eating, drinking, chewing gum, using tobacco or the toilet. Launder contaminated clothing before reuse.

Storage: Store Turbocharge B in original container(s) only in a well-ventilated, cool, dry, secure area. Protect this product from heat, sparks and flame. Do not expose sealed containers to temperatures greater than 40°C and prevent this product from freezing.

8. Exposure Controls, Personal Protection and Exposure Limits:

Exposure limits: Petroleum oil: ACGIH TLV is 5 mg/m³.

Surfactant: not available

Octanol: not available

Engineering controls: Atmospheric conditions should be maintained below the exposure guidelines.

Breathing: Use an approved air-purifying respirator if respiratory irritation is experienced or if concentrations of vapors in air are unknown.

Protective clothing: For brief contact during manufacture, warehousing and transport, wear clean body-covering clothing. During operations where exposure to the concentrated product may occur, use protective clothing impervious to this product. Use of items made of heavy-duty nitrile rubber or ethyl vinyl alcohol is suggested. Selection of specific items such as face-shield, respirator, boots, gloves, apron or full body suit will depend on the operation being carried out. Applicators and other field handlers, including persons repairing or cleaning application equipment, must wear clean body-covering clothing, impervious gloves and boots. In addition, persons making and/or transferring field dilutions of this product must wear an impervious apron.

Eyes: Use chemical workers' goggles.

Other protection: In interior work situations, locate a safety shower and eye wash station close to the work area. Under field conditions, a supply (at least 20 liters) of emergency wash water and an eyewash bottle containing no less

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than one liter of fresh clean water must be located near the work area.

9. Physical and Chemical Properties:

Boiling point: >100°C

Vapor pressure: Not available

Volatility: Not available

pH: 6.5 (1% suspension in water at 25 °C).

Appearance: Pale yellow liquid

Odor: Mild aromatic

Coefficient of water/oil distribution: Not available

Specific gravity: 0.87 to 0.88 at 20°C

Evaporation rate: Not available

Solubility in water: Emulsifies

Freezing point: -10°C

Odor threshold: Not available

Melting point: Not applicable

10. Stability and Reactivity:

Stability: This product is stable under normal conditions.

Incompatibility: Avoid strong oxidizers. This product may ignite under fire conditions.

Hazardous decomposition products: This product may decompose at high temperatures forming toxic gases. Thermal decomposition products may include carbon monoxide, carbon dioxide and other irritating gases.

Hazardous polymerization: Not available

11. Toxicological Information:

Skin absorption: Acute dermal LD50 (rabbit): >2000 mg/kg

Ingestion: Acute oral LD50 (rat): >5000 mg/kg

Inhalation: Excessive or chronic inhalation exposure may cause coughing and sneezing, central nervous system depression, peripheral nervous system effects, and damage to blood forming tissues and accelerated heart rate. Excessive exposure may result in unconsciousness and possible death due to breathing difficulties.

Sensitization: Turbocharge B did not cause allergic skin reactions when tested in guinea pigs.

Chronic effects: No toxicity information is available on this specific product; this health hazard assessment is based on information that is available on similar preparations. These include CNS depression, which is characterized

by headache, dizziness, drowsiness, nausea vomiting and incoordination. Severe overexposure may lead to coma and possible death due to respiratory failure. Peripheral neuropathy is a progressive disorder of the nervous system characterized by sensory and motor abnormalities, muscle spasms, weakness and pain in the arms and legs, numbness and tingling of the fingers and toes and paralysis.

Cancer: The ingredients in this product are not considered to be carcinogens by ACGIH, OSHA or NTP.

Birth defects: No information is available. No adverse effects are anticipated.

Reproductive effects: No information is available. No adverse effects are anticipated.

Mutagenicity: No information is available. No adverse effects are anticipated.

12. Ecological Information:

This material is toxic to fish and wildlife.

Degradation and Metabolism:

Although Turbocharge B is not directly applied to surface waters, it may reach the aquatic environment via off-target spray drift or overland run-off during heavy rainfall events. In addition, Turbocharge B has limited potential for leaching to groundwater. However, degradation in soil and the aquatic environment is expected to occur fairly rapidly via microbial bio-transformation and hydrolysis.

13. Disposal Considerations:

Unused unwanted product: Contact Viterra Inc. or your provincial regulatory agency for disposal information.

Container disposal: Refer to the product label for instructions regarding cleaning and disposal of empty pesticide containers. If these instructions are missing or not understood, contact Viterra Inc. at 1-866-569-4411 or your provincial regulatory agency for direction.

14. Transport Information:

This product is classified as "**Not Regulated**" under regulations of the Transportation of Dangerous Goods Act.

15. Regulatory Information:

Pest Control Products Act registration number: 29288

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For information phone: 1-866-569-4411

16. Other Information:

National Fire Code classification: Not regulated

NFPA ratings: Health: 2; Flammability: 1; Reactivity 0.

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SDS Revisions: 15. Regulatory Information

Replaces: February 24, 2009

¹ Marengo is a trademark of Viterro Inc.
