



UNIVAR

Material Safety Data Sheet

NR01961

Agricultural Weedkiller No.1

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Id: NR01961

Product Name: Agricultural Weedkiller No.1

Synonyms: Stoddard Solvent

Chemical Family: Mineral spirits.

Application: Organic solvent. Pest Control Products Act Registration No. 2076

Distributed By:

Univar Canada Ltd.
9800 Van Horne Way
Richmond, BC
V6X 1W5

Prepared By: The Safety, Health and Environment Department of Univar Canada Ltd.

Preparation date of MSDS: 31 July 2007

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	Percentage (W/W)	LD50s and LC50s Route & Species:
Solvent Naphtha (petroleum), Medium Aliph. 64742-88-7	100	Acute Oral LD50>6216mg/kg (Rat) Acute Dermal LD50>3108mg/kg (Rabbit) Acute Inhalation LC50>14.1 mg/l/4 hours (Rat)

Note: No additional remark.

3. HAZARDS IDENTIFICATION

Potential Acute Health Effects:

Eye Contact: Vapours are moderately irritating to the eyes. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision.

Skin Contact: Causes moderate skin irritation. Skin irritation signs and symptoms may include a burning sensation, redness, swelling and blisters. Prolonged or repeated contact may cause defatting and drying of the skin.

Inhalation: Vapours expected to be slightly irritating. Vapours may cause drowsiness and dizziness. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing. Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.

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3. HAZARDS IDENTIFICATION

Ingestion: Harmful if swallowed. May cause lung damage if swallowed. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and or fever.

4. FIRST AID MEASURES

Eye Contact: Flush eyes with water for at least 15 minutes while holding eyelids open. Obtain medical attention.

Skin Contact: Wash contaminated skin with mild soap and water for 15 minutes. If irritation persists or signs of toxicity occur, seek medical attention.

Inhalation: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

Ingestion: Do not induce vomiting. Guard against aspiration into lungs by having the individual turn on to their left side. Do not give anything by mouth to an unconscious person. Get immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Notes to Physician: Causes central nervous system depression. Dermatitis may result from prolonged or repeated exposure. Potential for chemical pneumonitis. Consider: gastric lavage with protected airway, administration of activated charcoal.

5. FIRE FIGHTING MEASURES

Flash Point: 40 - 46 °C / 104 - 115 °F

Flash Point Method: Tag Closed Cup

Autoignition Temperature: 230 - 270 °C / 446 - 518°F

Flammable Limits in Air (%): Lower: 0.6% Upper: 6%

Extinguishing Media: Use DRY chemicals, CO₂, alcohol foam or water spray. Do not discharge extinguishing waters into the aquatic environment.

Special Exposure Hazards: Combustible. Carbon monoxide may be evolved if incomplete combustion occurs. Product will float and can be reignited on surface of water. Vapors are heavier than air and may travel a long distance and accumulate in low lying areas. Use water spray to cool fire-exposed containers and structures.

Hazardous Decomposition/Combustion Materials (under fire conditions): Not available.

Special Protective Equipment: Fire fighters should wear full protective clothing, including self-contained breathing equipment.

NFPA RATINGS FOR THIS PRODUCT ARE: HEALTH 0, FLAMMABILITY 2, INSTABILITY 0

HMIS RATINGS FOR THIS PRODUCT ARE: HEALTH 0, FLAMMABILITY 2, REACTIVITY 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Avoid contact with spilled or released material. Immediately remove all contaminated clothing. Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed. Spills or releases should be reported, if required to the appropriate municipal, provincial and federal agencies.

Procedure for Clean Up: Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Monitor area with combustible gas indicator. For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely. For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.

7. HANDLING AND STORAGE

Handling: Avoid breathing vapours and prolonged or repeated contact with skin. Use with adequate ventilation. Wash thoroughly after handling. Keep away from heat, sparks and flame. Do Not smoke. Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 10 m/sec). Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations. Extinguish any naked flames. Product transfer - restrict line velocity during pumping in order to avoid generation of electrostatic discharge (≤ 1 m/sec until pipe is submerged to twice it's diameter, then ≤ 7 m/sec). Avoid splash filling. Keep the containers closed when not in use. Avoid prolonged contact with natural, butyl or nitrile rubbers. Empty containers may contain hazardous product residues. Do not cut, drill, grind, weld or perform similar operations on or near containers.

Storage: Store in a cool, dry, well ventilated area, away from heat and ignition sources. Use explosion-proof ventilation to prevent vapour accumulation. Tanks must be diked. Keep away from aerosols, flammables, oxidizing agents and corrosives. Store at ambient temperature. Maximum storage time: 6 months. For containers or container linings use mild steel or stainless steel. For container paints, use epoxy paint, zinc silicate paint.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Electrical and mechanical equipment should be explosion proof. Concentrations in air should be maintained below lower explosive limit at all times or below the recommended threshold limit value if unprotected personnel are involved. Local ventilation recommended where mechanical ventilation is ineffective in controlling airborne concentrations below the recommended occupational exposure limit. For personnel entry into confined spaces (i.e. bulk storage tanks) a proper confined space entry procedure must be followed including ventilation and testing of tank atmosphere. Make up air should always be supplied to balance air exhausted (either generally or locally).

Respiratory Protection: If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for organic gases and vapours [boiling point >65 °C (149 °F)]. Where air-filtering respirators are unsuitable (e.g., airborne concentrations are high, risk of oxygen deficiency, confined space) use appropriate positive pressure breathing apparatus.

Gloves:

Longer term protection - Nitrile rubber gloves. Incidental contact/Splash protection - PVC or neoprene rubber gloves.

Skin Protection: In confined spaces or where the risk of skin exposure is much higher, impervious clothing should be worn.

Eyes: Chemical safety goggles and/or full face shield to protect eyes and face, if product is handled such that it could be splashed into eyes.

Other Personal Protection Data: Ensure that eyewash stations and safety showers are proximal to the work-station location.

Ingredients	Exposure Limit - ACGIH	Exposure Limit - OSHA	Immediately Dangerous to Life or Health - IDLH
Solvent Naphtha (petroleum), Medium Aliph.	ACGIH TLV- 100ppm	OSHA VPEL - 100ppm	Not Available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Colour: Light

Odour: Hydrocarbon odour.

pH Not Available.

Specific Gravity: 0.77 - 0.79 @ 15°C.

Boiling Point: 149-213°C / 300-415°F

Freezing/Melting Point: Not Available.

Vapour Pressure: 300 Pa @ 20°C.

Vapour Density: 4.8

% Volatile by Volume: Not Available.

Evaporation Rate: 0.13 @ 20°C.

Solubility: Insoluble in water.

VOCs: Not Available.

Viscosity: 1.33 cSt @ 20 deg C

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9. PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight: 143 g/mol

Other: Not Available.

10. STABILITY AND REACTIVITY

Chemical Stability: Stable.

Hazardous Polymerization: Will not occur

Conditions to Avoid: Avoid excessive heat, open flames and all ignition sources.

Materials to Avoid: Oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition is highly dependent on conditions. A complex mixture of airborne solids, liquids and gases, including carbon monoxide, carbon dioxide and other organic compounds will be evolved when this material undergoes combustion or thermal or oxidative degradation.

Additional Information:

No additional remark.

11. TOXICOLOGICAL INFORMATION

Principle Routes of Exposure

Ingestion: Harmful if swallowed. May cause lung damage if swallowed. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and or fever.

Skin Contact: Causes moderate skin irritation. Skin irritation signs and symptoms may include a burning sensation, redness, swelling and blisters. Prolonged or repeated contact may cause defatting and drying of the skin.

Inhalation: Vapours expected to be slightly irritating. Vapours may cause drowsiness and dizziness. Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing, and/or difficulty breathing. Breathing of high vapour concentrations may cause central nervous system (CNS) depression resulting in dizziness, light-headedness, headache, nausea and loss of coordination. Continued inhalation may result in unconsciousness and death.

Eye Contact: Vapours are moderately irritating to the eyes. Eye irritation signs and symptoms may include a burning sensation, redness, swelling, and/or blurred vision.

Additional Information: Cardiovascular system: chronic abuse of similar materials has been associated with irregular heart rhythms and cardiac arrest. Central nervous system: repeated exposure affects the nervous system. Kidney: caused kidney effects in male rats which are not considered relevant to humans.

Acute Test of Product:

Acute Oral LD50: >8ml/kg

Acute Dermal LD50: >4ml/kg(Rat)

Acute Inhalation LC50: >14100 mg/m³ for 4 hours (Rat)

Carcinogenicity:

Ingredients	IARC - Carcinogens	ACGIH - Carcinogens
Solvent Naphtha (petroleum), Medium Aliph.	Not listed.	Not listed.

Carcinogenicity Comment: Repeated exposure causes skin tumour promotion in experimental animals.

Reproductive Toxicity/ Teratogenicity/ Embryotoxicity/ Mutagenicity: Not expected to be mutagenic. Not expected to impair fertility. Not expected to be a developmental toxicant.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information:

Ingredients	Ecotoxicity - Fish Species Data	Acute Crustaceans Toxicity:	Ecotoxicity - Freshwater Algae Data
Solvent Naphtha (petroleum), Medium Aliph.	LC50 (Pimephales promelas) 800 mg/L	Not Available.	EC50 (Selenastrum capricornutum) 450 mg/L

Other Information: Floats on water. Oxidises rapidly by photo-chemical reactions in air. Has the potential to bioaccumulate.

13. DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations.

Contaminated Packaging: Drain container thoroughly. After draining, vent in a safe place away from sparks and fire. Residues may cause an explosion hazard. Do not puncture, cut or weld uncleaned drums.

14. TRANSPORT INFORMATION

DOT (U.S.):

DOT Shipping Name: PETROLEUM DISTILLATES, N.O.S.

DOT Hazardous Class 3

DOT UN Number: UN1268

DOT Packing Group: III

DOT Reportable Quantity (lbs): Not Available.

Note: No additional remark.

Marine Pollutant: No.

TDG (Canada):

TDG Proper Shipping Name: PETROLEUM DISTILLATES, N.O.S.

Hazard Class: 3

UN Number: UN1268

Packing Group: III

Note: Not regulated under the Transportation of Dangerous Goods Act when transported by road or rail in packagings or containers of 450 L or less (waste excluded).

Marine Pollutant: No.

15. REGULATORY INFORMATION

U.S. TSCA Inventory Status: All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Note: Not available.

U.S. Regulatory Rules

Ingredients	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Solvent Naphtha (petroleum), Medium Aliph.	Not Listed.	Not Listed.	Not Listed.

California Proposition 65: Not Listed.

MA Right to Know List: Not Listed.

New Jersey Right-to-Know List: Not Listed.

Pennsylvania Right to Know List: Not Listed.

WHMIS Hazardous Class:

WHMIS EXEMPT

Pest Control Products Act Registration No. 2076.

16. OTHER INFORMATION

Additional Information:

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

Disclaimer:

NOTICE TO READER:

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Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a Product Specification Sheet and/or a Certificate of Analysis. These can be obtained from your local Univar Sales Office.

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END OF MSDS