

MATERIAL SAFETY AND DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

COMPANY ADDRESS:

RAINBOW TREECARE SCIENTIFIC ADVANCEMENTS
11571 K-Tel Drive
Minnetonka, MN 55343

EMERGENCY TELEPHONE NUMBERS:

CHEMTREC, (Transportation and spills)
(800) 424-9300

PRODUCT NAME : RTSA Horticultural Oil
CHEMICAL NAME : Refined Light Paraffinic Petroleum Oil
CHEMICAL FAMILY : Petroleum Oil
PRODUCT CODE : EPA Reg. No. 74779-9

SECTION 2 - COMPOSITION, INFORMATION OF INGREDIENTS

COMPONENT	CAS No	PERCENTAGE	OSHA PEL	ACIGH TLV
Severely Refined Light Paraffinic Petroleum Oil	64741-89-5	90 - 100	TWA 5 mg/m ³ 8 hours (oil mist limit)	STEL 10 mg/m ³ 15 minutes (oil mist limit)
Alkyl Aryl Polyoxyethoxyethanol Nonionic Surfactant		0 - 1	None	None
Alkyl Phenol Coupler		0 - 1	None	None

SECTION 3 - HAZARDS IDENTIFICATION SUMMARY

(As defined by OSHA Hazard Communication Standard)

EMERGENCY OVERVIEW

Danger! Harmful or fatal if swallowed. Pulmonary aspiration hazard. While ingesting or vomiting, may enter lungs and produce damage.

Hazards Ratings:

Key: 0 = least, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	Health	Fire	Reactivity	PPI
NFPA	0	1	0	
HMIS	0	1	0	X

POTENTIAL HEALTH EFFECTS

- PRE-EXISTING MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**

The following diseases or disorders may be aggravated by exposure to this product: skin, respiratory system, lung (asthma-like conditions),

- INHALATION**

High vapor concentrations are irritating to the eyes, nose, throat, and lungs.

LC50 (mg/l): no data

LC50 (mg/m3): no data

LC50 (ppm): no data

- SKIN**

Practically non-toxic if absorbed through the skin. Substance does not generally irritate and is only mildly irritating to the skin.

Draize Skin Score: 1.84 Out of 8.0

LD50 (mg/kg): >5,000

- EYES**

Substance causes slight eye irritation.

- **INGESTION**

Practically non-toxic if ingested. Harmful or fatal if swallowed. Pulmonary aspiration hazard. While ingesting or vomiting, may enter lungs and produce damage.

LD50 (g/kg): >30

SECTION 4 - FIRST AID MEASURES

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and continue to monitor. Get medical attention.

SKIN: Wash with soap and water for 20 minutes. Get medical attention if irritation develops or persists. Wash clothing before reuse.

EYES: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

INGESTION: Do not induce vomiting! Do not give liquids! Get medical attention immediately.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

SECTION 5 - FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Water spray; Regular foam; Dry chemical; Carbon dioxide;

FIRE FIGHTING INSTRUCTIONS

Wear structural fire fighting gear. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

FLAMMABLE PROPERTIES

	Typical	Minimum	Maximum	Text Results	Units	Method
Flash Point		340			F	COC
Auto ignition Temperature	650			Estimated	F	N/A
Lower Explosion Limit				No Data	%	N/A
Upper Explosion Limit				No Data	%	N/A

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Contain spilled liquid with sand or earth. DO NOT use combustible materials such as sawdust. Use appropriate personal protective equipment as stated in Section 8 of this MSDS. Advise the Environmental Protection Agency (EPA) and appropriate state agencies, if required. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Vacuum or sweep up material and place in a disposal container.

SECTION 7 - HANDLING AND STORAGE

HANDLING: Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated contact with skin. Avoid contact with eyes. Wash thoroughly after handling.

STORAGE: Store in a cool dry place. Keep container closed when not in use. NFPA class IIIB storage. Flash point is greater than 200 degrees F.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Consult With a Health and Safety Professional for Specific Selections

ENGINEERING CONTROLS: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use with adequate ventilation.

PERSONAL PROTECTION:

EYE PROTECTION: Splash proof chemical goggles are recommended to protect against the splash of product.

GLOVES or HAND PROTECTION: Protective gloves are recommended when prolonged skin contact cannot be avoided. The glove(s) listed below may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Polyvinyl chloride (PVC); Neoprene; Nitrile; Polyvinyl alcohol; Viton;

RESPIRATORY PROTECTION: Concentration in air determines the level of respiratory protection needed. Use only NIOSH certified respiratory equipment. Respiratory protection is not usually needed unless product is heated or misted. Half-mask air purifying respirator with dust / mist filters or HEPA filter cartridges is acceptable for exposures to ten (10) times the exposure limit. Full-face air purifying respirator with dust / mist filters or HEPA filter cartridges is acceptable for exposures to fifty (50) times the exposure limit. Protection by air purifying respirators is limited. Use a positive pressure-demand full-face supplied air respirator or SCBA for exposures greater than fifty (50) times the exposure limit. If exposure is above the IDLH (Immediately Dangerous to Life and Health) or there is the possibility of an uncontrolled release, or exposure levels are unknown, then use a positive pressure-demand fullface supplied air respirator with escape bottle or SCBA. Wear a NIOSH-approved (or equivalent) full-face piece airline respirator in the positive pressure mode with emergency escape provisions.

OTHER: Where splashing is possible, full chemically resistant protective clothing and boots are required. The following materials are acceptable for use as protective clothing: Polyvinyl alcohol (PVA); Polyvinyl chloride (PVC); Neoprene; Nitrile; Viton; Polyurethane; Remove contaminated clothing and wash before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless fluid
Boiling Point: No data
Bulk Density: 7.1 lbs/gallon.
Melting Point: No data
Molecular Weight: 300 g/mole
Octanol/Water Coefficient: No data
pH: No data
Specific Gravity: 0.86
Solubility in Water: Nil
Odor: Little odor
Odor Threshold: No data
Vapor Pressure: < 0.0001 @ 20 C
Viscosity: 68 SUS @ 100 F
% Volatile: Nil

SECTION 10 - STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: Avoid heat, sparks and open flame
INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizers
HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may produce carbon monoxide, carbon dioxide and other asphyxiants.
HAZARDOUS POLYMERIZATION: Will not polymerize.

SECTION 11 - ECOLOGICAL INFORMATION

This material is expected to be toxic to aquatic organisms.

SECTION 12 – DISPOSAL CONSIDERATIONS

Follow federal, state and local regulations. This material is not a RCRA hazardous waste, if not contaminated. If material has been “used”, RCRA criteria (ignitability, reactivity, corrosivity and toxicity) must be determined. Do not flush material to drain or storm sewer. Contract to authorized disposal service.

SECTION 13 - TRANSPORT INFORMATION

<u>Governing Body</u>	<u>Mode</u>	<u>Proper Shipping Name</u>
IATA	Air	Not Determined
DOT	Ground	PETROLEUM OIL NOIBN
IMDG	Marine	Not Regulated

<u>Governing Body</u>	<u>Mode</u>	<u>Hazard Class</u>	<u>UN/NA No.</u>	<u>Label</u>
IATA	Air	Not Determined		
DOT	Ground	N/A	N/A	
IMDG	Marine			

SECTION 14 - REGULATORY INFORMATION

HCS Classification:	Not regulated
TSCA – Section 8(b) Inventory:	Severely solvent refined light paraffinic petroleum oil. CAS: 64741-89-5
Massachusetts Right To Know List:	Severely solvent refined light paraffinic petroleum oil. CAS: 64741-89-5

Title III Classifications Sections 311,312:

- Acute: **YES**
- Chronic: **NO**
- Fire: **NO**
- Reactivity: **NO**
- Sudden Release of Pressure: **NO**

SECTION 15 - OTHER INFORMATION

This product is in EPA Hazard Category IV. WHMIS Classification: not controlled. Please refer to the material safety data sheet for complete information. Limits for the product- 5mg/m3, Oil Mist Limit, (OSHA PEL/ACGIH TLV)

DISCLAIMER: The information presented herein is based on available data from reliable sources and is correct to the best of Rainbow Treecare Scientific Advancements knowledge. Rainbow Treecare Scientific Advancements makes no warranty, express or implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

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