

MATERIAL SAFETY DATA SHEET

Remo's Roots Gel

FILE NO.: 4671010-60

MSDS DATE: 12/19/2014

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Remo's Roots Gel
MATERIAL USES: Propagation Gel
PRODUCT CODES: 4671010-4671060

MANUFACTURER: Remo Brands Inc.
DIVISION: Remo Nutrients
ADDRESS: #14-20295 113B Ave. Maple Ridge, BC V2X6E9

EMERGENCY PHONE: 1-703-527-3887
CHEMTREC PHONE: 1-800-424-9300

PRODUCT USE: Propagation Gel for Plants
PREPARED BY: Remo Brands

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Propylene Glycol, 1-Indole-3 Butyric Acid, 2-(1-Naphyl) Acetic Acid

<u>CAS NO.</u>	<u>%</u>	<u>SARA 313 REPORTABLE</u>
57-55-6	10-25	No
133-32-4	.45	No
86-87-3	1	No

SECTION 2 NOTES:

There are no additional ingredients present, which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Not expected to produce significant adverse health effects when the manufactures instructions for use are followed. No known significant effects or critical hazards. Avoid prolonged contact with eyes, skin, and clothing.

ROUTES OF ENTRY: Dermal Contact. Eye Contact. Inhalation. Ingestion.

POTENTIAL HEALTH EFFECTS

EYES: no known significant effects or critical hazards

SKIN: no known significant effects or critical hazards

INGESTION: no known significant effects or critical hazards

INHALATION: no known significant effects or critical hazards

ACUTE HEALTH HAZARDS: no known significant effects or critical hazards

CHRONIC HEALTH HAZARDS: no known significant effects or critical hazards

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: See toxicological information (section 11)

CARCINOGENICITY:

OSHA/HCS STATUS: While this material is not considered by the OSHA Hazard Communication Standard (29 CFR 1910.1200), This MSDS contains valuable information critical to safe handling and proper use of the product. This MSDS should be retained and available for employees and to other users of this product.

SECTION 4: FIRST AID MEASURES

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EYES: Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.

SKIN: Wash with soap and water. Get medical attention if symptoms occur.

INGESTION: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.

NOTES TO PHYSICIANS OR FIRST AID PROVIDERS: No action shall be taken involving personal risk or without suitable training. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY OF THE PRODUCT: May be combustible at high temperature.

EXTINGUISHING MEDIA: Use an extinguishing agent suitable for the surrounding fire.

SPECIAL FIRE FIGHTING PROCEDURES: Wear appropriate protective equipment and self-containing breathing equipment (SCBA) with a full face piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8)

ENVIRONMENTAL PRECAUTIONS: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollutions (sewers, waterways, soil and air)

METHODS FOR CLEANING UP SMALL SPILL: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

LARGE SPILL: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material (sand, earth, vermiculite, or diatomaceous earth) and place in container for disposal according to local regulation (see section 13 dispose of via licensed waste contract. Contaminated absorbent material may pose the same hazard as the spilled product.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Put on appropriate protective equipment (see section 8). Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approval alternative made from compatible material. Keep tightly closed while not in use. Do not reuse container. Store in accordance with local regulations. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Avoid environmental contamination.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

PRODUCT NAME: Propylene Glycol
EXPOSURE LIMITS: AIHA WEEL (US 1/2007)

MONITORING PROCEDURES:
No special ventilation requirements. Good ventilation should be sufficient to control worker exposure to airborne contaminants.

HYGIENE MEASURES:

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Wash hands, forearms and face thoroughly after handling chemical products and before eating, smoking, and using lavatory. Appropriate techniques should be used to remove potentially contaminated clothing. Ensure that eyewash stations and safety showers are close to workstation location.

PERSONAL PROTECTION EQUIPMENT:

Apron, goggles and gloves

HMIS Code/PPE: A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Transparent blue gel

ODOR: Neutral

PHYSICAL STATE: Liquid Gel

pH AS SUPPLIED: 6.2-6.5

pH (Other):

BOILING POINT:

F: 370.8

C: 188.2

MELTING POINT:

F: -74

C: -59

FREEZING POINT:

F: 32

C: 0

VAPOR PRESSURE (mmHg):

@ 0kPa

C: 20 – 0.08mmHg

VAPOR DENSITY (AIR = 1):

2.62

SPECIFIC GRAVITY (H2O = 1):

1.036

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (cont.)

SOLUBILITY IN WATER: Partially soluble in cold and hot water

WITHOUT WATER: LBS/GAL

MOLECULAR WEIGHT: 76.1g/mol

SECTION 10: STABILITY AND REACTIVITY

STABLE

UNSTABLE

STABILITY: This Product is Stable

CONDITIONS TO AVOID (STABILITY): No specific data

INCOMPATIBILITY (MATERIAL TO AVOID): Oxidizing materials. Slightly reactive to acids and alkalis.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Under normal conditions of storage and use, should not be produced.

HAZARDOUS POLYMERIZATION: Under normal contains of storage and use, will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION:

Acute Toxicity

Product Name	Species	Dose	Result
Propylene Glycol	Rabbit	20800 mg/kg	LD50 Dermal
	Rat	20 g/kg	LD50 Oral

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SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No known significant effects or critical hazards

Aquatic Eco toxicity:

Product Name	Species	Exposure	Result
Propylene Glycol	Fish	96 hours	Acute LC50 710000 ug/L Chronic NOEC 60000ug/L

SECTION 13: DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. Dispose of container in a safe manner via a licensed waste disposal contractor. Comply with the requirements of environmental protection and waste disposal contractor. Comply with the requirements of environmental protection and waste disposal regulation. Avoid dispersal of spilled material and runoff and contract with soil, waterways, sewers and drains.

Refer to section 7 and section 8 for additional information.

SECTION 14: TRANSPORT INFORMATION

AERG: Not Applicable

DOT/IMDG/IATA: Not regulated

SECTION 15: REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

HCS Class: Not Regulated

TSCA (TOXIC SUBSTANCE CONTROL ACT): All components are listed or exempted

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT): No products found

SARA 302/304/311/312 EXTREMELY HAZARDOUS SUBSTANCE: No products were found

302/304 EMERGENCY PLANNING AND NOTIFICATION: No products were found

311/312 MSDS DISTRIBUTION:

Propylene Glycol: Immediate health hazard, delayed health hazard

CLEAN WATER ACT 307/311: No products found

CLEAN AIR ACT 113: No products found

INTERNATIONAL REGULATIONS: This product is exempt from be listed, in Australia (AICS), Europe (EINEC), Korea (TCCL), Japan (METI), and the Philippines (RA6969)

SECTION 16: OTHER INFORMATION

LABEL REQUIREMENTS: Not expected to produce significant adverse health effects when the recommended instructions for use are followed.

HAZARDOUS MATERIAL: Information systems (U.S.A)

HAZARD RATING

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

See section 8 for more detailed information on personal protection.

Health 0

Fire Hazard 0

Physical Hazard 0

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Personal Protection A

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VERSION: 1
PREVIOUS ISSUE: None