

APEX ENGINEERING PRODUCTS CORPORATION
1241 Shoreline Drive
Aurora, IL 60504
Phone Number: 630-820-8888 Fax: 630-820-8886

SAFETY DATA SHEET

1. IDENTIFICATION OF THE PRODUCT AND COMPANY _____

Product Identifier

RYDALL HD (pronounced: rid-all HD)
Aqueous cleaning solution.

Relevant identified uses of the product and uses advised against

General use: Cleaning and degreasing.
Uses advised against: Do not mix with oxidizers or disinfecting agents.

Manufacturer Information

Apex Engineering Products Corporation, established 1942
1241 Shoreline Drive
Aurora, Illinois 60504

Emergency Phone (Chemtree): 800-424-9300 (Domestic and Canada)

2. HAZARD IDENTIFICATION _____

Classification of the substance or mixture

Mixture

Hazard pictograms:



Signal word: Warning

Hazard statements:

H316: Causes mild skin irritation.
H320: Causes eye irritation.

Precautionary statements:

(Prevention) P233: Keep container tightly closed.
P273: Avoid release to the environment.
P280: Wear protective gloves and eye protection.
P281: Use personal protective equipment as required.
(Response) P301+P315+P331: IF SWALLOWED: Get immediate medical
advice/attention. Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with soap and water.

P321: Specific treatment, see section 4 of this SDS.
P332+P313: If skin irritation occurs, get medical attention.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes, remove contact lenses if present and easy to do, continue rinsing.
P337+P313: If eye irritation persists, get medical attention.
P370+P378: In case of fire: Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.
P403+P235: Store in well ventilated place. Keep cool.

Other hazards: Not applicable.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance: Not applicable

Mixture: Chemical characterization (preparation)

CAS	PRODUCT NAME: RYDALL HD	% by Weight
7732-18-5	Water, distilled, conductivity or of similar purity	75-90
N/A	Proprietary mixture	10-20
94266-47-4	Citrus Terpenes	4-7

There are no additional ingredients present which, within the current knowledge of the supplier, are classified as hazardous to the health or the environment.

4. FIRST AID MEASURES

Description of first aid measures

After inhalation: If product mist causes nose, throat, and respiratory tract irritation, coughing or headaches, move the exposed person to fresh air immediately. If symptoms persist, seek medical attention.

After skin contact: Wash affected area with soap and water. If irritation persists, seek medical attention.

After eye contact: Immediately flush eyes with large amounts of water for 15 minutes. Remove contact lenses if present, after the first 5 minutes and continue rinsing. If irritation persists, seek medical attention.

After swallowing: Do NOT induce vomiting, drink milk, egg whites, etc. and seek immediate medical attention.

Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Causes mild eye irritation. Symptoms include redness, stinging, tearing and swelling.

Skin: May cause mild to moderate irritation. Repeated and prolonged use may result in drying or cracking of skin or dermatitis.

Inhalation: Inhalation of mist or spray may cause mild irritation of the respiratory tract.

Ingestion: May be harmful if swallowed. Seek medical attention immediately.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Water, carbon dioxide, foam or dry chemical. Caution: Carbon dioxide will displace air in confined spaces and may create an oxygen deficient atmosphere.

Unsuitable media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the mixture: Forms acrid fumes, carbon monoxide, and carbon dioxide.

Advice for firefighters

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

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear appropriate protective equipment.

Environmental precautions: Prevent spill from entering drains and waterways. Dispose of material in accordance with the local, State, Provincial, and Federal regulations for your location.

Methods and materials for containment and cleaning up: Absorb with an inert material. Use non-sparking tools and equipment. Collect into a suitable container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Observe label precautions. Keep away from heat, sparks, and flame. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.

Condition for safe storage: Keep in cool, dry, ventilated storage areas in closed containers. Transfer only to approved containers having correct labeling. Storage temperature should not exceed the flash point for extended periods of time. Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters: For undiluted Citrus Terpenes, the 8h TWA=30 ppm.

Exposure controls

Engineering: Maintain general industrial hygiene practice. Use normal exhaust, vent to atmosphere.

Personal protective equipment: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

Respiratory equipment: None required under normal operating conditions, even when materials vapors and/or mists occur.

Protective gloves: Recommended.

Eye protection: Wear protective goggles or safety glasses during use.

Environmental exposure controls: Do not empty into drains or waterways.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Blue liquid
Odor:	Citrus aroma
Odor threshold:	Not applicable
pH:	Approximately 8
Freezing/melting point:	Not Determined
Initial boiling point:	Not Determined / Over 100°C (212°F)
Flash point:	98°C (208°F)
Evaporation rate:	Not determined
Flammability (solid, gas):	Not applicable
Lower explosive limit (LEL)	Not determined
Upper explosive limit (UEL)	Not determined
Vapor Pressure:	Not determined
Density at 20°C:	0.99 g/cm ³ (8.3 lbs/gal).

Solubility in Water:	Complete
Partition coefficient (n-octano/water):	Not determined
Autoignition temperature:	Not determined
Decomposition temperature:	Not determined

10. STABILITY AND REACTIVITY

Reactivity: No special reactivity reported, hazardous polymerization will not occur.

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: Reaction with strong oxidizers will generate heat and may cause fire.

Conditions to Avoid: Avoid heat, sparks, flames, and all other sources of ignition.

Incompatible materials: Strong oxidizing agents, peroxides, halogens, vinyl chloride, and iodine pentafluoride.

Hazardous decomposition: Oxides of citrus terpenes, which can result from improper storage and handling, are known to cause skin sensitization.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

No toxicity test have been carried out for this product. Acute toxicity data was estimated based on the toxicity of the individual components contained in this product.

Acute oral toxicity: Product is expected to have low acute oral toxicity.

Acute inhalation toxicity: Product is expected to have low acute inhalation toxicity.

Acute dermal toxicity: Product is expected to have low acute dermal toxicity.

Skin irritation: May cause mild skin irritation.

Eye irritation: Causes moderate to severe eye irritation.

Sensitization: No data available for mixture. d-Limonene is a skin sensitizer.

Carcinogenic categories: None of the components of this product are listed as carcinogens by AGCIH, IARC, NTP or OSHA.

12. ECOLOGICAL INFORMATION

Aquatic toxicity: The d-Limonene component may be toxic to aquatic life. However, due to the physical properties of the product (density and volatility) it will not remain in the environment for an extended period of time.

Persistence and degradability: Product is readily biodegradable.

Bioaccumulation potential: The d-Limonene component suggests the potential for bio-concentration in aquatic organisms.

Mobility in soil: The components of this product are water soluble and highly mobile in soil.

Results of PBT and vPvB assessment: No data available.

Other adverse effects: None.

13. DISPOSAL CONSIDERATIONS

Waste disposal: Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains. Dispose of material in accordance with the local, State, Provincial, and Federal regulations for your location.

Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

UN Number: DOT-Not regulated, IMDG/IATA-Not applicable
UN proper shipping name: DOT/IATA-Not applicable, IMDG-Not regulated
Transport hazard class(es): DOT/IMDG/IATA-Not applicable
Packing group: DOT/IMDG/IATA-Not applicable
Marine pollutant: No
Special precautions: Not applicable

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for substance or mixture

U.S. Federal Regulations

OSHA Hazard Communication Standard: Irritant, Sensitizer.

OSHA Process Safety Management Standard: Components of this product are not regulated under OSHA PSM Standard 29 CFR 1910.119.

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

SARA Section 311/312 Hazard Categories: Not classified as hazardous.

SARA 313 Information: Not listed.

Comprehensive Response Compensation and Liability Act (CERCLA): Not reportable

Clean Air Act (CAA): This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

Clean Water Act (CWA): None of the chemicals in this product are listed as Hazardous Substances, Priority Pollutants or Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986: This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

Canada

WHMIS Hazard Symbol and Classification: Not applicable/Not classified as hazardous

Domestic Substance List (DSL): All components in this product are listed on the DSL inventory.

Canadian National Pollutant Release Inventory (NPRI): None of the components in this product are listed on the NPRI or are below threshold reporting limits.

Europe

RoHS: This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

EUROPEAN UNION: All of the components of this product are listed on the European Inventory of New and Existing Chemical Substances (EINECS) inventory.

16. OTHER INFORMATION

Please use material only as directed. If procedures are not published for your particular application, please call for assistance. Furthermore, RYDALL HD is designed to be used by itself or diluted with water and water only.

Date of preparation: Creation date for SDS 01/23/2019.

**FOR ADDITIONAL INFORMATION, PLEASE CONTACT OUR MANUFACTURING FACILITY
AT 630-820-8888 OR OUR WEBSITE AT www.ApexEngineeringProducts.com.**

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