

SAFETY DATA SHEET

HD21 DOUBLE DIAMOND

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND OF THE COMPANY

Identification of Preparation: HD21 Double Diamond Auto Dish Detergent
Date of Safety Data Sheet: December 27, 2017
Use of Preparation: Dishwasher Detergent.
Company Identification: Hawco Products Ltd./ Diamond Products
61 Shaver Street, PO Box 1507
Brantford, Ontario N3T 5V6

Company Emergency Telephone Number Emergency Phone: 519-759-2443

2. HAZARD IDENTIFICATION

Emergency Overview:
OSHA / WHMIS 2015 Hazards
Classification of substance or mixture
GHS-US/Canadian classification:
GHS Hazards
Corrosive to Metals Category 1 H290
Skin Corrosive Category 1A H314
Eye Damage Category 1 H318

Label Elements

GHS-US/ Canada Labeling

Hazard Pictograms (GHS):



Signal Word (GHS): Danger

Hazard Statements (GHS):

H290: May be corrosive to metals.

H302: Harmful if swallowed

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

Precautionary Statements (GHS):

P102: Keep out of reach of children.

P260: Do not breathe mist, spray, and vapours.

P264: Wash hands thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P280: Wear face protection, protective clothing, protective gloves, and eye protection.

Response Statements (GHS):

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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P310: Immediately call a POISON CENTRE or doctor/physician.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P315: Get immediate medical advice/attention, if concerned.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

P363: Wash contaminated clothing before re-use.

P501: Dispose of contents / container in accordance with local regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Chemical Blend

Ingredient	CAS#	% by Wt	Classification
Potassium Hydroxide	1310-58-3	30-60	Corrosive to Metals Category 1- H290 Acute Toxicity Category 4 (Oral) - H302 Skin Corrosion/Irritation Category 1A – H314 Serious Eye Damage/Eye Irritation Category 1 - H318
Tetrapotassium pyrophosphate	7320-34-5	1-5	Corrosive to Metals Category 1 – H290 Skin Corrosion/Irritation Category 2 – H315 Serious Eye Damage/Irritation Category 2A – H319

4. FIRST AID MEASURES

Inhalation:	Remove to fresh air. If symptoms persist consult physician.
Eye Contact:	Remove contacts. Flush with water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Repeat if required. If irritation persists, get medical attention.
Skin Contact:	Thoroughly wash exposed skin with soap and water. Remove any contaminated clothing and wash before reuse.
Ingestion:	Wash out mouth with water. Drink plenty of water. Do not induce vomiting unless directed by medical personal. Never give anything to an unconscious person. Get medical aid.
Notes to Physician:	Treatment based on judgment of attending physician.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media:	Flood with water for extinguishing agent. CO2, dry chemical, alcohol resistant foam
Unsuitable extinguishing media:	None known.
Special exposure hazards	Thermal decomposition releases irritating gases.
Special safety equipment:	Self-contained positive pressure breathing apparatus and protective clothing.
Fire and explosion	Not flammable. Not an explosive hazard.

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Further information

Keep containers and surrounding cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes, on skin, or on clothing. Do not breathe vapour or mist.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately with absorbent and dispose of waste safely.

Reference to Other Sections

See Heading 8. Exposure controls and personal protection.

7. HANDLING AND STORAGE

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid splashes or spray in enclosed areas.

Information about fire and explosion protection:

Keep respiratory protective device available.

No special measures required.

Conditions for safe storage, including any incompatibilities:

Storage: Acids, oxidizers, reducing agents.

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Protect from humidity and water.

Unsuitable material for receptacle: steel.

Unsuitable material for receptacle: aluminium.

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:

Do not store together with strong acids.

Store away from oxidizing agents.

Store away from foodstuffs.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well-ventilated area.

Keep container tightly sealed.

Specific end use(s) No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Respiratory protection: Use local exhaust or dilution ventilation.
Hand protection: Chemical resistant gloves.
Eye protection: Safety goggles or full-face shield.
Skin protection: Use body-covering impervious clothing.
Working hygiene: Take usual precautions when handling. Workers should wash hands before eating, drinking or smoking.
Exposure Guidelines:
Potassium Hydroxide: ACGIH Ceiling 2 mg/m³
 OSHA PEL (TWA) 2 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

<u>Physical State</u>	Liquid	<u>Odour</u>	Typical
<u>Appearance</u>	Clear.	<u>Odour Threshold</u>	No data available.
<u>Colour</u>	Water white	<u>Remarks/Method</u>	
<u>Property</u>	<u>Values</u>		
pH	13.0-14.0	None known	
Melting/Freezing Point	No data available	None known	
Boiling Point/Range	No data available	None known	
Flash Point	Not applicable.	None known	
Evaporation Rate	Similar	None known	
Flammability (solid, gas)	Not flammable	None known	
Flammability Limit in Air:			
Upper Limit	No data available	None known	
Lower Limit	No data available	None known	
Vapour Pressure	No data available	None known	
Vapour density	No data available	None known	
Specific gravity	1.15 g/cm ³		
Water Solubility	Soluble in water.	None known	
Solubility Other Solvents	No data available	None known	
Partition Coefficient:			
n-octanol/water	No data available	None known	
Autoignition temperature	No data available	None known	
Decomposition Temperature	No data available	None known	
Kinematic Viscosity	No data available	None known	
Dynamic Viscosity	No data available	None known	
Explosive Properties	No data available	None known	
Oxidizing Properties	No data available	None known	
Other Properties:			
Softening Point	No data available		
VOC Content %	No data available		
Particle Size	No data available		
Particle Size Distribution	No data available		

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10. STABILITY AND REACTIVITY

Reactivity	Stable at normal ambient temperature and pressure.
Chemical stability	Stable under recommended handling and storage conditions (see section 7).
Thermal decomposition/conditions to avoid:	No decomposition if used and stored according to specifications.
Possibility of hazardous reactions	Hazardous polymerization will not occur.
Conditions to avoid	Extremely high or low temperatures. Contact with aluminum.
Hazardous decomposition products	Carbon oxides (CO, CO ₂). Sodium oxides.
Materials to avoid	Metals such as aluminum. Reducing agents, oxidizing agent. Strong acids.
Hazardous polymerization	Will not occur

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: Harmful if swallowed.

LD/LC50 values relevant for classification:

Potassium Hydroxide CAS# 1310-58-3:

LD50 (Oral, rat): 490 mg/kg

On the skin: Causes severe skin irritation.

On the eye: Causes serious eye damage.

Respiratory or Skin Sensitization: Not classified.

Additional toxicological information:

Carcinogenicity:

Chemical Name None

12. ECOLOGICAL INFORMATION

Toxicity:	Not classified
Persistence and Degradability:	Not available
Bioaccumulative Potential:	Not available
Mobility in Soil:	Not available.
Other Adverse Effects	
Other Information:	All of the organic components of this product are readily biodegradable.

13. DISPOSAL

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology – Waste Materials: Avoid release to the environment.

14. TRANSPORTATION INFORMATION

Canadian T.D.G.: Regulated Material (quantity under 1litres can be shipped Limited Quantity)

Proper Shipping Name: Caustic Alkali liquid, N.O.S.

Contains: Potassium Hydroxide.

Hazard Class: 8

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ID Number: UN 1719
Packing Group: II



U.S. Department of Transportation (DOT): Regulated material

Proper Shipping Name: Caustic Alkali liquid, N.O.S.
Contains: Potassium Hydroxide.
Hazard Class: 8
ID Number: UN 1719
Packing Group: II



Water Transportation (IMDG): Regulated Material

Proper Shipping Name: Caustic Alkali liquid, N.O.S.
Contains: Potassium Hydroxide.
Hazard Class: 8
ID Number: UN 1719
Packing Group: II



Air Transportation (IATA): Regulated Material

Proper Shipping Name: Caustic Alkali liquid, N.O.S.
Contains: Potassium Hydroxide.
Hazard Class: 8
ID Number: UN 1719
Packing Group: II



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15. REGULATORY INFORMATION

Occupational Health & Safety Regulations:

WHMIS 1988 Classification: Class D - Division 2B, Class E



OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Products Act).

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	-
PICCS	-
AICS	Complies

Legend:

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances Control Act Section 8(b) Inventory.

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

HMIS III Rating

Health: 3 Hazard

Flammability: 0 Minimal Hazard

Physical: 0 Minimal Hazard

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Personal Protection: C
SDS US (GHS HazCom 2012 and WHMIS 2015)

16. OTHER INFORMATION

Prepared By: Technical Department.

Issuing Date: December 27, 2017

Disclaimer:

The manufacturer warrants that this product conforms to its standard specification when used according to direction. To the best of our knowledge the information contained herein is accurate. However, we do not assume accuracy or completeness of the information contained herein.

Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

End of Safety Data Sheet