

Unit 101 – 2762 190 Street Surrey, BC V3Z 3W6 Canada

RBM HOLDWASH-HD MATERIAL SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION

Product Identifier: RBM HoldWash HD

Product Code(s): HW-HD20C

Product Use: Heavy Duty Degreasing Syrup
Chemical Family: Proprietary Mixture / Preparation

Information Telephone #: +1 (604) 531-8333 24 Hr. Emergency Tel #: Refer to supplier

Supplier's Name and Address:

RBM HoldSolutions Unit 101-2762 190th Street Surrey, British Columbia, Canada

V3S 3W6

SECTION 2 – HAZARDS IDENTIFICATION

2.1 Classification of the mixture:

2.1.1 Regulation (EC) No. 1272/2008 (CLP):Combustible liquid (Category 4)
Aspiration hazard (Category 1)

2.1.2 Directive 67/548/EEC & Directive 1999/45/EC: Not regulated

2.2 Label elements:

2.2.1 Label elements According to Regulation (EC) No. 1272/2008 (CLP):

GHS Product Identifier: (EU)
 Hazard pictogram(s): GHS08

Signal word(s): Danger

Hazard statement(s): Combustible liquid.

May be fatal if swallowed and/or enters airways

H227: Combustible liquid

H305: May be fatal if swallowed and/or enters airways

Precautionary Statement(s):

P210: Keep away from heat, sparks, open flame, hot surfaces - No smoking

P280: Wear protective gloves/protective clothing/eye protection/face protection

P370+P378: In case of fire - Use water or dry foam for extinction

P403+P235: Store in a well-ventilated place. Keep cool

• P301+P310: IF SWALLOWED - Immediately call a POISON CENTER or doctor/physician

P331: DO NOT induce vomiting

P405: Store locked up

2.2.2 Label elements According to Directive 67/548/EEC & Directive 1999/45/EC:

Hazard Symbol: Not regulated
 Risk Phrase: Not Regulated
 Safety Phrases: Not regulated

2.3 Other hazards - Potential Health Effects:

Inhalation: May cause drowsiness or dizziness.

Eyes: This chemical can cause eye irritation.

Skin: Avoid Prolonged Contact

Ingestion: May be harmful if swallowed and/or enters airways. Causes nausea, vomiting and diarrhea.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient(s)	% W/W	CAS No. EC No.	Regist. #	Hazard pictogran	EC Classification and Risk Phrases		
d-Limonene	7-13%	5989-7-5 227-813-5			Flam.liq.3 H226, Skin irrit 2, H315, Skin sens 1, H317 Acuatic chronic 1, H400,H410	*	F, Xi, Xn, N: R10, R38, R43,R50/53
Distillate(petrol) hydrotreated light	10-30%	64742-478 265-149-8			Acute tox 4 H302, Asp Tox 1 H304, Acute Tox 3 H331 Aquat chron2 H411	×	Xn, R65
Monoethanola mine	1-5%	141-43-5 265-149-8		<u>(1)</u>	Acute Tox.4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr.1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	Th.	C, R 20/21/22 R 34

MSDS Preparation Date: 02/21/2018



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SECTION 4 - FIRST AID MEASURES

4.1. Description of first aid measures:

Eyes: Check for and remove any contact lenses. Do not rub eyes. Immediately flush with warm running water, keeping

eyelids apart for 15 minutes. Call a physician if irritation develops.

Skin: Remove contaminated clothing. Wash affected skin with soap and water. See a physician if irritation develops.

Ingestion: No toxic effect is expected. Rinse mouths with water and drink 1 glass of water. Do not induce

vomiting. Consult a physician.

Inhalation: Provide for immediate access to fresh air. If symptoms persist, seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed: May cause lung damage if swallowed

4.3 Indication of the immediate medical attention and special treatment needed: Treat symptomatically

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Extinguishing media: Suitable Extinguishing Media: Extinguish preferably with water or dry foam

Unsuitable Extinguishing Media: Not available.

5.2 Special hazards arising from the substance or mixture: Product is combustible and a slip hazard.

5.3 Advice for fire-fighters: Suitable protective clothing should be worn in fire conditions.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Small spill: Use appropriate tools to wipe up the product. Rinse contaminated area with water.

 Large spill: Stop the leak if possible. Ventilate the area involved. Prevent liquid solution from entering sewer or storm drains. Contain and clean-up the spill. Observe all personal protection equipment recommendations. Observe personal protection requirements during removal of spillage. Eliminate all ignition sources if safe to do so. Local authority should be notified if significant spill cannot be contained. Keep people away from and upwind of spill.

For emergency personnel:

Use personnel protection recommended in Section 8

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water sources or on the ground.

6.3 Methods and material for containment and cleaning up:

- Spills to be contained to avoid release into sewers, storm drains or natural water sources.
- Wear suitable protective clothing, gloves and eye/face protection.
- Remove or safe guard all sources of ignition. Clean up remaining liquid with water.
- **6.4 Reference to other sections:** See Also Section 7, 8, 13.

6.5 Additional Information: Waste Disposal: Follow local regulations for discharge of waste and effluent.

SECTION 7 – HANDLING AND STORAGE

7.1 Precautions for safe handling:

- Avoid breathing vapor.
- Avoid ingestion. Use only in well-ventilated areas.
- Avoid inhalation of high concentrations of vapors.
- Keep away from oxidizing and/or reducing agents.
- Keep away from fire, sparks, heated surfaces and open flames.
- No smoking.

7.2 Conditions for safe storage, including any incompatibilities:

- Store in a well-ventilated place. Do not use or store near heat or open flame.
- Do not store and/or transport with oxidizers etc.
- Keep container closed when not in use.
- To be stored in temperatures not exceeding +50° Celsius
- Storage Life Not available.
- Incompatible with Oxidizing agents and Strong Acids.

7.3 Specific end use(s): Not applicable

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SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters:

8.1.1 Occupational Exposure Limits Not Available.

8.1.2 Biological limit value 8.1.3 PNECs and DNEL'sBiological limit values are not available for this product.
No PNEC's and/or DNEL's are available for this product.

8.2 Exposure controls:

8.2.1 Appropriate engineering controls: Guarantee sufficient ventilation during and after use to prevent vapor accumulation.

8.2.2 Personal protection equipment:

Protective Hand wear:

 Protective Eyewear:
 Other protective clothing:

 Gloves recommended preventing drying of hands.

 Safety glasses with side shields or goggles

 Not required.
 Not required.

Respiratory Apparatus:
 Adequate fresh air ventilation recommended

Local/mechanical exhaust: Not normally required if good ventilation is maintained.

8.2.3 Environmental Exposure Controls:

Adequate ventilation must be used. Guarantee sufficient ventilation during & after use, to prevent vapor accumulation.

SECTION 9 - PHYSICAL DATA

Physical State:	Liquid	Odor	Mild
Appearance	Gold	Odor Threshold	N/E
Specific Gravity	0.933	Vapor Pressure	N/Ap
Vapor Density (Air = 1)	N/Av	Evaporation Rate	N/E
Boiling Point (0C)	N/Av	Freezing Point: (°C)	-20 °C
Solubility in Water	N/Av	pH Factor	10.60
Flash Point/Method op. cup (°C)	72°C	% Volatile	N/E
Explosive limits	No	Oxidizer	No
Water solubility	N/Av	Viscosity	N/E
Partition coefficient	N/Av	Auto Ignition Temperature	N/E
Decomposition Temperature	N/Av	Explosive Properties	N/E

SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity: Strong oxidizing agents, strong reducing acids

10.2 Chemical Stability: Stable under normal conditions

10.3 Possibility of hazardous reactions: Can react if in contact with – strong oxidizing agents

10.4 Conditions to avoid:Avoid contact with heat and ignition sources10.5 Incompatible materials:Strong oxidizing agents, strong reducing acids

10.6 Hazardous Decomposition Product(s): Carbon monoxide, Carbon dioxide

10.7 Hazardous polymerization: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Information on toxicological effects:

11.1.2 Mixtures

Acute Oral Toxicity Estimate:
 Acute Dermal Toxicity Estimate:
 LD 50 (Oral, rat) > 4,066 mg / kg
 LD 50 (Dermal, rat) > 2,400 mg / kg

Irritation: Causes eye irritation

Skin sensitization: None

Corrosivity: Not to be expected

Carcinogenicity Data: Ingredients of this product is not classed as carcinogenic by ACGIH, IARC or OSHA

Reproductive Data:
 Mo adverse reproductive effects are anticipated
 Mutagenicity Data:
 No adverse reproductive effects are anticipated

Skin sensitization:
 Is not a skin sensitizer.

11.2 Other information: None



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SECTION 12 – ECOLOGICAL INFORMATION

12.1 Toxicity: 96 hour LC50 (Tilapia Nilotica): 22.6 mg/l

96 hour LC50 (Rainbow trout):20 mg/l48 hour EC50 (Daphnia magna):27 ppm72 hour EC50 (Raphidocelis subcapitata)40 mg/l

12.2 Persistence and degradability:Readily Bio-degradable

12.3 Bio-accumulative potential:Not Available12.4 Mobility in soil:Not Available12.5 Results of PBT and vPvB assessment:No data12.6 Other adverse effects:None

With reference to MEPC 63/23/Add. 1, Annex 24 Resolution MEPC 219(63) as adopted on March 02, 2012; RBM HoldSolutions declares herewith that the hold cleaning product referred to as RBM HoldWash HD and marketed by RBM HoldSolutions, the nature of which is covered in this SDS meets the criteria as non-harmful to the marine environment as described under section 1.7.5 of above resolution.

This statement is not valid for any other solutions or chemicals, which may be put on the market with identical or similar product name. The names of RBM HoldSolutions and RBM HoldWash HD must be mentioned on the product label and in the Safety Data Sheet.

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods: Consult your local regional authority for disposal options

13.2 Additional Information: Avoid release into the environment

SECTION 14 – TRANSPORT INFORMATION

14.1 ADR Classification:Not Regulated14.2 DOT (Department of Transportation):Not Regulated14.3 TDG (Canada Transport of Dangerous Goods):Not Regulated14.4 ICAO/IATA:Not Regulated14.5 IMO/IMDG:Not Regulated

SECTION 15 – REGULATORY INFORMATION

15.1. US Federal Information:

OSHA: This material is classified as hazardous under OSHA regulations (29 CFR 1910.1200).

Hazardous classification: Acute Health Hazard / Combustible liquid

USA TSCA (Toxic Substance Control Act): All chemicals listed

US CERCLA Reportable quantity (RQ): N/Ap

SARA TITLE III: Sec.302: 40 CFR 355 No extremely hazardous substances are present in this material.

SARA TITLE III: Sec.313: 40 CFR 372 Contains no materials subject to reporting requirements of SARA (III) Section 313 SARA TITLE III: Sec.311 & 312: 40 CFR 370 MSDS Requirements. Hazardous Classes: Fire Hazard; Acute Health Hazard.

Under SARA Section 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is low, for extremely hazardous substances and 10,000 pounds for all the other hazardous chemicals.

US State Right to Know Law

Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986: This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels under which would be subject to the proposition.

Other states

Ingredient(s)	CAS	CA	MA	MN	NJ	PA	RI
d-Limonene	5989-7-5 227-813-5	No	No	No	No	No	No
Distillate(petrol) hydrotreated light	64742-478 265-149-8	No	No	No	No	No	No
Monoethanolamine	141-43-5 265-149-8	Yes	Yes	Yes	Yes	Yes	Yes



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SECTION 15 - REGULATORY INFORMATION - CONT'D

International information

Canadian Environmental Protection Act (CEPA): All ingredients listed appear on the Domestic Substances List(DSL)

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

European Union (EINECS/ELINCS) All chemicals listed

Canada WHMIS Classification Class B 3, Combustible Liquid, Class D 2B (Mild Eye irritation)

15.3 Chemical Safety Assessment: COMBUSTIBLE LIQUID. ASPIRATION HAZARD. MILDLY IRRITANT TO EYES

SECTION 16 - OTHER INFORMATION

ACGIH American Conference of Governmental Industrial Hygienists NA Not applicable/ Not available AICS Australian Inventory of Chemical Substances – NIOSH (National Institute for Occupational Safety and Health) ANSI American National Standards Institute ND Not determined ATM Atmosphere (pressure unit) - NFPA (National Fire Prevention Association) R10 Flammable. R34 Causes burns R38 Irritating to skin. R43 May cause sensitization by skin contact. R50/53 Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. S25 Avoid contact with eyes. S36 Wear suitable protective clothing. If swallowed, seek medical advice immediately and			Diale Dhyanan and Cafatu Dhyanan.
Armerican Conference of Governmental Industrial Hygienists NA Not applicable/ Not available AICS Australian Inventory of Chemical Substances – NIOSH (National Institute for Occupational Safety and Health) ANSI American National Standards Institute ND Not determined ATM Atmosphere (pressure unit) - NFPA (National Fire Prevention Association) R34 Causes burns Irritating to skin. R43 May cause sensitization by skin contact. R50/53 Very toxic to aquatic organisms may cause long-term adverse effects in the aquatic environment. R65 Harmful: may cause lung damage if swallowed. S25 Avoid contact with eyes. S36 Wear suitable protective clothing. If swallowed, seek medical advice immediately and	LEGEN	D:	Risk Phrases and Safety Phrases:
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ATM Atmosphere (pressure unit) - NFPA (National Fire S36 Wear suitable protective clothing. S46 If swallowed, seek medical advice immediately and	ANSI	American National Standards Institute	3
Prevention Association) S46 If swallowed, seek medical advice immediately and	ND	Not determined	
	ATM	Atmosphere (pressure unit) - NFPA (National Fire	
		Prevention Association)	
BOD Biological oxygen demand - NTP (National Toxicology show this container or label	BOD	Biological oxygen demand - NTP (National Toxicology	snow this container or label
			Hazard statement(s) and Precautionary statement(s):
CAS Chemical Abstracts Service - OC open cup H226 Flammable liquid and vapor.			H226 Flammable liquid and vapor.
CC Closed cup - OSHA (Occupational Safety and Health H302 Harmful if swallowed	CC		H302 Harmful if swallowed
Administration) H304 May be fatal if swallowed and enters airways.			H304 May be fatal if swallowed and enters airways.
CDTA Chemical Diversion and Trafficking Act H312 Harmful in contact with skin.	-		H312 Harmful in contact with skin.
COC Cleveland Open Cup – PEL (Permissible exposure limit) H314 Causes severe skin burns and eye damage			
COD Chemical oxygen demand – PPB (Parts per billion) H315 Causes skin irritation			
CFR Code of Federal Regulations – PPM (Parts per million) H318 May cause an allergic skin eye damage			
CPR Cardio-pulmonary resuscitation – PSI (Pounds per square H331 Toxic in contact with skin	CPR		
inch) H332 Harmful if inhaled	DE 4		
DEA Drug Enforcement Agency - RCRA (Resource H335 May cause respiratory irritation.	DEA		
Conservation and Recovery Act) H400 Very toxic to aquatic life.	DOT		
DOT Department of Transportation - RQ (Reportable quantity) H410 Very toxic to aquatic life with long lasting effects. DSCL Dangerous Substances Classification and Labeling – RTK H411 Toxic to aquatic life with long lasting effects.	-	Department of Transportation - RQ (Reportable quantity)	
Title Toxio to aquatio in o with long labeling of other	DSCL		
/ Lib ittop and not not	EEC		
	EEC		
1 200 Wear protective gioved protective distring by	FDΔ		
FDA Food and Drug Administration - STEL (Short-term protection/face protection. exposure limit) P370+P378 In case of fire: Use water or dry foam for fire	IDA		
IARC International Agency for Research on Cancer – TCC suppression	IARC		•
(Tagliabue Closed Cup) P403+P235 Store in a well-ventilated place. Keep cool.	IAITO		
LC50 Median lethal concentration - TSCA (Toxic Substances P301+P310 IF SWALLOWED: Immediately call a	LC50		
Control Act) POISON CENTER or doctor/physician	2000		
LD50 Median lethal dose - TWA (Time-weighted average) P331 DO NOT induce vomiting	LD50	,	
LEL Lower explosive limit			1 331 23 1131 maddo vormang
UEL Upper explosive limit	UEL		

Additional information and disclaimer:

Information for this Safety Data Sheet was prepared from sources considered reliable. While every effort has been made to ensure full disclosure of product hazards, data are not available in some cases and is so stated where applicable. The manufacturer and/or supplier assume no liability or responsibility howsoever and no warranty is expressed or implied in the event that the product is mishandled, misused and/or instructions are not strictly observed. Each user of the product described herein is encouraged to study and fully understand the information and instructions contained in this MSDS.

Under reference to MEPC 63/23/Add. 1, Annex 24 Resolution MEPC 219(63) as adopted on March 02, 2012; RBM HoldSolutions declares herewith that the hold cleaning product referred to as RBM HoldWash-HD and marketed by RBM HoldSolutions, the nature of which is covered in this SDS meets the criteria as non-harmful to the marine environment as described under section 1.7.5 of above resolution.

Prepared by: **RBM HoldSolutions** Contact details: Phone: +1 604 531-8333 Email: rbm@holdsolutions.com Date issued: February 21, 2018 Replaces: August 25, 2015

MSDS Preparation Date: 02/212018

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