DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 49TH WING (ACC)
HOLLOMAN AIR FORCE BASE NEW MEXICO

ENTERED
MAR 27 2015

RECEIVED
MAR 30 2015
NMED
Hazardous Waste Bureau

A. David Budak
Base Civil Engineer
550 Tabosa Avenue
Holloman AFB NM 88330
EPA ID# NM6572124422

New Mexico Environment Department
Hazardous Waste Bureau
Attn: Mr. John Kieling
2905 Rodeo Park Drive East, Building 1
Santa Fe NM 87505

Dear Mr. Kieling

Thank you for your recent visit and we look forward to continue our positive relationships with NMED and your employees.

Attached is our response including additional documentation to your Notice of Violation letter dated 20 Feb 2015. We have addressed all items listed in the NOV letter.

If you have any questions about our response, please contact Ms. DeAnna Rothhaupt, 49 CES/CEIE, Environmental Compliance Element Chief, at (575) 572-3931.

Sincerely

A. DAVID BUDAK, GS-14, DAFC

Attachment
Notice of Violation Response w/Attchs

HOLLOMAN AFB RESPONSE TO NOTICE OF VIOLATIONS

The following actions provided below address the required response to the Notice of Violation dated February 20, 2015 from the New Mexico Environmental Department.

VIOLATION 1a: When the F-22s were here, a vacuum-debris waste stream was being generated at Building 898. This waste stream was non-regulated. No IAP was established for this waste stream. A copy of the profile sheet for this waste stream was previously sent to your office. See Attachment 1 for a copy of this profile sheet. The barrel that collected this waste stream was located outside of the building beneath the vacuum machine. When the F-16s arrived, a new empty barrel was placed beneath the vacuum machine to collect sanding waste. The barrel was labeled as, "DEBRIS FROM SHOP VACUUMING OPERATIONS AWAITING ANALYSIS". When enough waste has accumulated to obtain a representative sample, laboratory analysis will be performed to further characterize this waste stream.

VIOLATION 1b: Please see Attachment 2. It contains an archived Safety Kleen manifest for Building 280, dated March 10, 2011 and a Waste Profile Sheet. The waste determination is shown in the US DOT DESCRIPTION paragraph. The paragraph reads, "WASTE COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA) NA1993 PGIII (D039) (ERG#128)".

VIOLATION 1c: Please see Attachment 3. It contains the MSDS for the Optometry Clinic eye drops. The MSDS states the eye drops are not a RCRA Hazardous Waste.

VIOLATION 1d: Please see Attachment 4. It contains the MSDS for the stain waste and a Waste Profile Sheet. In Paragraph 15, the WHMIS Hazard Class is listed as B2, the stain has an EPA Waste Code of D001. Using our generator knowledge, we have determined that the MSDS accurately represents the waste stream.

VIOLATION 2: When the waste stream changed from F-22s to F-16s, a new empty barrel was placed beneath the vacuum machine to collect sanding waste. The barrel was labeled as, "DEBRIS FROM SHOP VACUUMING OPERATIONS AWAITING ANALYSIS". When enough waste has accumulated to obtain a representative sample, laboratory analysis will be performed to further characterize this waste stream.
Additional Action Taken: The words "POTENTIALLY HAZARDOUS WASTE" have since been added for further clarification pending full characterization of this waste stream See Attachment 5 for pictures of the barrel.

VIOLATION 3: 40 CFR 262.34(c)(1) does not specify a distance. Our measurements show the IAP is actually 54 feet away from the building. The IAP is located within a secured compound and is under the control of the generator. Due to mission requirements it cannot be located closer to the HazMart building. We believe the IAP is "at or near the point of generation" as defined in 40 CFR 262.34(c)(1). See Attachment 6 for a picture showing the relative locations of HazMart and the IAP building.
Action Required: None at this time per 40 CFR 262.34(c)(1)

VIOLATION 4: Annual refresher training includes site specific scenarios which meet and or exceed the requirement of 40 CFR 265.16(c). See Attachment 7 for training certificates and class descriptions for Mrs. Rothhaupt and Mr. Hamann .

VIOLATION 5: Your inspection reports states, "documents reviewed by inspectors indicated the position descriptions did not meet the requirements in 40 CFR 265.16(d) for Mr. Hamann and Mrs. Rothhaupt." Mr. Hamman and Ms. Rothhaupt are administrators to the Hazardous Waste Facilities contract. The contract manager POC, operator POC and training requirements are listed in attachment 8. The contractor's training matrix meets the requirements of 40 CFR 265.16.

HAZARDOUS WASTE PROFILE SHEET

NOTE: Explosives, Shock Sensitive, Pyrophoric, Radioactive, and Etiological Waste are not normally accepted by the DRMO
Contact your DRMO for further guidance if your waste meets any of these categories.

Part I

A. GENERAL INFORMATION 1. GENERATORS NAME HOLLOMAN AIR FORCE BASE	WASTE PROFILE NO. MS13-0536A
2. FACILITY ADDRESS 241 ARKANSAS AVENUE. 3. ZIP CODE 88330 HOLLOMAN AFB NM United States	5. GENERATOR USEPA ID NM6572124422 6. GENERATOR STATE ID
ORGANIZATION NAME 49 MAINTENANCE SQ SHOP NAME STRUCTURAL MAINT PAINT OFFICE SYMBOL MXMFS/BLDG 898	
7. TECHNICAL CONTACT JOHN HAMANN 8. TITLE Environmental Contact	9. PHONE (575) 572-6644

B. WASTE INFORMATION
1. NAME OF WASTE: DEBRIS FROM VACCUMING PROCESS

2A. USEPA WASTE CODE

2B. STATE/LOCAL/HOST-NATION WASTE CODES

3. PROCESS GENERATING WASTE

4. PROJECTED ANNUAL VOL	5. MODE OF COLLECTION ACCUMULATION

6. IS THIS WASTE A DIOXIN LISTED WASTE AS DEFINED IN CFR 261.31? [ ] YES [X] NO

7. IS THIS WASTE RESTRICTED FROM LAND DISPOSAL? (40 CFR 268) [X] YES [ ] NO
HAS AN EXEMPTION BEEN GRANTED? [ ] YES [X] NO
DOES THE WASTE MEET APPLICABLE TREATMENT STANDARDS ALREADY? [ ] YES [X] NO
(If yes, Enter Reference Standards in Part 3, Block 6)

Part II

1. MATERIAL CHARACTERIZATION (Optional - Not Required Data)

COLOR	DENSITY	BTU/LB
TOTAL SOLIDS	ASH CONTENT	

LAYERING [ ] MULTILAYERED [ ] BILAYERED [ ] SINGLE

2. RCRA CHARACTERISTICS

PHYSICAL STATE [X] SOLID [ ] LIQUID [ ] SEMI-SOLID [ ] GAS [ ] OTHER

OTHER CHARACTERISTICS

[ ] IGNITABLE [ ] CORROSIVE (D002) [ ] REACTIVE(D003) [ ] WATER REACTIVE [ ] CYANIDE REACTIVE [ ] SULFIDE REACTIVE

Flash Point ph

[ ] HIGH TOC (≥ 10%) [X] LOW TOC (<10%) TREATMENT GROUP: [ ] WASTEWATER [X] NON-WASTEWATER

Atch 1

HAZARDOUS WASTE PROFILE SHEET (Continued)

WASTE PROFILE NO.
MS13-0536A

3. CHEMICAL/MATERIAL COMPOSITION List all components and contaminants, including PCB's, and any applicable F-Listed and underlying Hazardous Constituents.

CAS #	COMPONENT (Be as descriptive as possible. Chemical names, as well as generic descriptions. e.g., 'sludge', 'paint solids', 'water' etc. are acceptable)	CONCENTRATION	RANGE
7440020	NICKEL	= 4.2 %	
		RANGE TOTAL MUST EQUAL AT LEAST 100%	

3. MATERIAL COMPOSITION / UNDERLYING HAZARDOUS CONSTITUENTS

CAS #	COMPONENT (Be as descriptive as possible. Chemical names, as well as generic descriptions. e.g., 'sludge', 'paint solids', 'water' etc. are acceptable)	CONCENTRATION	RANGE
7440473	CHROMIUM	= 1 MG/L	
57125	CYANIDE	= 44.2 MG/L	
		RANGE TOTAL MUST EQUAL AT LEAST 100%	

safety-kleen

5360 Legacy Drive, Building 2, Suite 100 800-669-5740
Plano, Texas 75024 www.safety-kleen.com
CUSTOMER NO.

WE CARE

DUNS NO. 05-397-6551 FED. ID NO. 396090019

CUSTOMER

FOR SERVICE CALL	BRANCH MANAGER	DOC. EXP.	SCHEDULED SERVICE WEEK	SCHEDULED TERRITORY	REFERENCE NUMBER
915-849-5050			11-11	2	535067794

CREDIT CODE	PREVIOUS BALANCE	BAL. OVER 60 DAYS

CUSTOMER SEGMENT	CHAIN	OUTER COUNTY	SVC. P/C	PROD. P/C
54	4950			

LOCATION	TAX EXEMPTION NO.

GENERATOR

3 0 2 9 8 8 1

HOLLOMAN AIR FORCE BASE

BLDG 200

HOLLOMAN AIR FORCE BASE, NM 88330 US

BILL TO

3029881
DFAS-LIMESTONE OPLOC-F671W0
27 Arkansas Rd
Limestone ME US 04751-6217

SERVICE DATE	SALES REP NO.	CUSTOMER P.O. NUMBER	CUSTOMER PHONE #	TAX CODE	DATE EQPT/PROD ORDERED	SERVICE TAX	C.O.M.S. TAX	PRODUCT TAX
3/10/11	5232		575 [illegible] 3951					

DEPT	SERVICE/ PRODUCT		REMARKS/ UNIT PRICE	QUAN.	CHARGE	SALES TAX	TOTAL CHARGE	WASTE MIN.	SOLVENT/DRUMS CLEAN	SPENT	# OF CONT.	SK DOT	CC	SERVICE TERM	CHANGE SERVICE TERM WEEKS	INITIAL	CHANGE SCH. DATE (YY WW)	INV. CODE	PROMO NO.		MSDS GIVEN
1	[illegible]		[illegible]	1	[illegible]	[illegible]	[illegible]														
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12					[illegible]	[illegible]	[illegible]														

We Recycle

WE CARE

TOTAL-SERVICE/PRODUCTS

CHECK APPROPRIATE BOXES

	GOOD	POOR
MACHINE CONDITION & CLEANLINESS	☐	☐
LAMP ASSEMBLY CONDITION	☐	☐

	YES	NO
DECALS IN PLACE AND LEGIBLE	☐	☐
FUSIBLE LINK INSTALLED	☐	☐
EMERGENCY CLOSING OF LID UNOBSTRUCTED	☐	☐
MACHINE PROPERLY GROUNDED	☐	☐
LOCAL PHONE NO. STICKER AFFIXED TO MACHINE	☐	☐
SPENT SOLVENT MEETS ACCEPTANCE CRITERIA	☐	☐

USEPA TRANSPORTER 1 ID NO.	USEPA TRANSPORTER 2 ID NO.	GENERATOR USEPA ID NO.	GENERATOR STATE ID NO.
[illegible]		[illegible]	

11. US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID.)

[illegible] (D039) (ERG#128)

12. CONTAINERS NO.	TYPE	13. TOTAL QUANTITY	14. UNIT WT/VOL	SK DOT NUMBER
3	DM	66	[illegible]	

I CERTIFY THAT MY TOTAL WASTE STREAMS ARE WITHIN ONE OF THE FOLLOWING CATEGORIES.

0 TO 220 LBS./MONTH — INITIALS

220 LBS. TO 2,200 LBS./MONTH — INITIALS

GREATER THAN 2,200 LBS./MONTH — INITIALS

DESIGNATED FACILITY NAME AND ADDRESS

I CERTIFY THAT NO MATERIAL CHANGE HAS OCCURRED EITHER IN THE CHARACTERISTICS OF THE WASTE MATERIALS OR IN THE PROCESS GENERATING THE WASTE MATERIALS.

USA EPA ID NO.

STATE ID NO.

PAYMENT RECEIVED SECTION

CASH ☐ TOTAL RECEIVED APPLY PAYMENT TO:
CHECK NUMBER ☐ TODAY'S SERVICE/SALE ☐ PREVIOUS BALANCE AS FOLLOWS

INVOICE #	AMOUNT $	INVOICE #	AMOUNT $

PREVIOUS CREDIT CARD NO

CREDIT CARD NO. AMEX VISA MC EXP. DATE

CUSTOMER REFERENCE INFORMATION

MANIFEST NO. 003694521 JK

LDR MESSAGE

MANIFEST CODE	SEQ #

IN THE EVENT OF AN EMERGENCY CALL 1-800-468-1760 (24 hours)

I AGREE TO PAY THE ABOVE CHARGES AND TO BE BOUND BY THE TERMS AND CONDITIONS SET FORTH ABOVE AND ON THE REVERSE SIDE OF THIS DOCUMENT. PLEASE CHARGE MY ACCOUNT FOR THIS TRANSACTION UNLESS OTHERWISE INDICATED IN THE PAYMENT RECEIVED SECTION. THE INDIVIDUAL SIGNING THIS DOCUMENT IS DULY AUTHORIZED TO SIGN AND BIND CUSTOMER TO ITS TERMS.

"This is to certify that the above-named materials are properly classified, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation."

Ramon Acevedo-Cruz
Print Customer Name

By: [signature]
Customer's Authorized Representative

VISA MasterCard AMERICAN EXPRESS

TOTAL CHARGE (FROM ABOVE)	
WASTE MIN. (FROM ABOVE)	
TOTAL DUE	

DO NOT WRITE IN THE AREA BELOW

THIS AGREEMENT CONTINUES ON THE REVERSE SIDE

SERVICE AND SALES ACKNOWLEDGMENT - PART 1366 (Rev. 04/10)

2015 Final Annual Recharacterization Waste Code Assignments - National

WASTE STREAMS			WASTE CODE CHANGES - NATIONAL		
2014 NATIONAL Profile/SKDOT	General Description	2014 National Waste Codes	2015 National Waste Codes	Changes from 2014 to 2015	2015 NATIONAL Profile/SKDOT
150100 / 626	Aqueous Brake Cleaner	None	None	No Change	150100 / 626
Refer to CH Outbound	Branch Contaminated Debris	F002, F003, F005, D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043	F002, F003, F005, D001, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D021, D022, D023, D024, D025, D026, D027, D028, D029, D030, D032, D033, D034, D035, D036, D037, D038, D039, D040, D041, D042, D043	No Change	Refer to CH Outbound
150629 / 950	Immersion Cleaner (IC 699)	D006, D008, D018, D027, D039, D040	D006, D008, D027, D039, D040	**Remove D018**	**155629 / 7545427**
150045 / 704 150085 / 801(RQ)	Parts Washer Solvent 105 Virgin	D001, D018, D039, D040	D001, D018, D039, D040	No Change	150045 / 704 150085 / 801(RQ)
Refer to CH Outbound	Parts Washer Solvents (Bulked) / Combination of 105 and 150 (Aqueous, where applicable)	D001, D018, D039, D040	D001, D018, D039, D040	No Change	Refer to CH Outbound
Refer to CH Outbound	Parts Washer Solvent Sludge/Dumpster Mud	D001, D018, D039, D040	D001, D018, D039, D040	No Change	Refer to CH Outbound
Refer to CH Outbound	Parts Washer Solvent Tank Bottoms (bulk)**	D001, D018, D039, D040	D001, D018, D039, D040	No Change	Refer to CH Outbound
150055 / 717	Parts Washer Solvent 150	D039	D039	No Change	150055 / 717
150055 / 717	PRF and PDF Mil Spec. Solvent	D039	D039	No Change	150055 / 717
150380 / 11658, 150425 / 12606(RQ)	Paint Gun Cleaner (SK)	F003, F005, D001, D018, D035, D039, D040	F003, F005, D001, D018, D035, D039, D040	No Change	150380 / 11658, 150425 / 12606(RQ)
150426 / 12607, 150427 / 12608(RQ)	Clear Choice Paint Gun Cleaner	F003, D001, D018, D035, D039, D040	F003, D001, D018, D035, D039, D040	No Change	150426 / 12607, 150427 / 12608(RQ)
150375 / 11653(ANY), 150376 / 11654(30), 150377 / 11655(55)	Paint Waste Other ***	F003, F005, D001, D018, D035, D039, D040	F003, F005, D001, D018, D035, D039, D040	No Change	150375 / 11653(ANY), 150376 / 11654(30), 150377 / 11655(55)
150589 / 7050108	Dry Cleaner (Perc) Bottoms	F002, D007,D039, D040	F002, D007,D039, D040	No Change	150589 / 7050108
150621 / 7050112	Dry Cleaner (Perc) Filters	F002, D007,D039, D040	F002, D007,D039, D040	No Change	150621 / 7050112
150591 / 7050118	Dry Cleaner (Perc) Separator Water	F002, D039, D040	F002, D039, D040	No Change	150591 / 7050118
150422 / 7051604	Dry Cleaning Naphtha Bottoms	D001, D007, D039, D040	D001, D007, D039, D040	No Change	150422 / 7051604
150424 / 12569	Dry Cleaning Naphtha Filters	D001, D007, D039, D040	D001, D007, D039, D040	No Change	150424 / 12569
150423 / 12566	Dry Cleaning Naphtha Separator Water	D001, D039, D040	D001, D039, D040	No Change	150423 / 12566
Refer to CH Outbound	Aqueous Parts Washer Tank Bottoms	D039, D040	NONE	**Remove D039, D040**	Refer to CH Outbound
Refer to CH Outbound	Aqueous Parts Washer Dumpster Sludge	NONE	NONE	No Change	Refer to CH Outbound

** Parts washer solvent tank bottoms are SK-generated wastes from the cleanout of solvent storage tanks. Safety-Kleen does not accept this waste stream from non-SK generators.

*** SKDOT 11653 is acceptable to use for any size container of paint waste. For those states that require 30-gal paint waste to be listed separately, use SK DOT 11654; for states that require 55-gal paint waste to be listed separately, use SK DOT 11655.

HAZARDOUS WASTE PROFILE SHEET (Continued)	WASTE PROFILE NO. MS13-0536A

4. SHIPPING INFORMATION		
DOT HAZARDOUS MATERIAL? ☐ YES ☒ NO		
PROPER SHIPPING NAME		
HAZARD CLASS	U.N. or N.A. NO.	PACKING GROUP
ADDITIONAL DESCRIPTION BLDG VACCUM DEBRIS (NON-REG)		
METHOD OF SHIPMENT ☐ BULK ☒ DRUM ☐ OTHER		
EMERGENCY RESPONSE GUIDE EDITION (YR)	EMERGENCY RESPONSE NUMBER	
5. SPECIAL HANDLING INFORMATION		

6. GENERATOR CERTIFICATION

☒ CHEMICAL ANALYSIS (ATTACH TEST RESULTS) ☐ USER KNOWLEDGE (ATTACH SUPPORTING DOCUMENTS)

EXPLAIN HOW AND WHY THESE DOCUMENTS COMPLY WITH RCRA REQUIREMENTS

Analysis: GT138009, run another sample for next drum before turning in.

BLDG Vaccum Debris (non-reg)

CERTIFICATION

I, John Hamann HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS IS TO THE BEST OF MY KNOWLEDGE AN ACCURATE REPRESENTATION OF THE WASTE TURNED IN TO THE DRMO. ALL KNOWN OR SUSPECTED HAZARDS HAVE BEEN DISCLOSED.

John Ham

Signature of Generator's Representative

23 May 13

Date

HAZARDOUS WASTE PROFILE SHEET

NOTE: Explosives, Shock Sensitive, Pyrophoric, Radioactive, and Etiological Waste are not normally accepted by the DRMO
Contact your DRMO for further guidance if your waste meets any of these categories.

Part I

A. GENERAL INFORMATION
1. GENERATORS NAME HOLLOMAN AIR FORCE BASE

WASTE PROFILE NO.
ER15-0524A v1

2. FACILITY ADDRESS
241 ARKANSAS AVENUE

3. ZIP CODE
88330

HOLLOMAN AFB NM United States

4. GENERATOR USEPA ID
NM6572124422

5. GENERATOR STATE ID

ORGANIZATION NAME	SHOP NAME	OFFICE SYMBOL
M1	HYDRAULIC SHOP (M1)	MAEHD/BLDG 280

6. TECHNICAL CONTACT	7. TITLE	8. PHONE
JOHN HAMANN	Environmental Contact	(575) 572-6644

B. WASTE INFORMATION
1. NAME OF WASTE: SAFETY KLEEN SOLVENT BATH (NON-REG)

2A. USEPA WASTE CODE

2B. STATE/LOCAL/HOST-NATION WASTE CODES

3. PROCESS GENERATING WASTE

4. PROJECTED ANNUAL VOL	5. MODE OF COLLECTION ACCUMULATION

6. IS THIS WASTE A DIOXIN LISTED WASTE AS DEFINED IN CFR 261.31? ☐ YES ☒ NO

7. IS THIS WASTE RESTRICTED FROM LAND DISPOSAL? (40 CFR 268) ☒ YES ☐ NO
HAS AN EXEMPTION BEEN GRANTED? ☐ YES ☒ NO
DOES THE WASTE MEET APPLICABLE TREATMENT STANDARDS ALREADY? ☐ YES ☒ NO
(If yes, Enter Reference Standards in Part 3, Block 6)

Part II

1. MATERIAL CHARACTERIZATION (Optional - Not Required Data)

COLOR:	DENSITY:	BTU/LB:

TOTAL SOLIDS:	ASH CONTENT:

LAYERING ☐ MULTILAYERED ☐ BILAYERED ☐ SINGLE

2. RCRA CHARACTERISTICS

PHYSICAL STATE ☐ SOLID ☒ LIQUID ☐ SEMI-SOLID ☐ GAS ☐ OTHER

OTHER CHARACTERISTICS
☐ IGNITABLE ☐ CORROSIVE (D002) ☐ REACTIVE(D003) ☐ WATER REACTIVE ☐ CYANIDE REACTIVE ☐ SULFIDE REACTIVE

Flash Point: = 145.0 FAHRENHEIT ph:

☐ HIGH TOC (≥ 10%) ☒ LOW TOC (<10%) TREATMENT GROUP: ☐ WASTEWATER ☒ NON-WASTEWATER

HAZARDOUS WASTE PROFILE SHEET (Continued)

WASTE PROFILE NO.
ER15-0524A v1

3. CHEMICAL/MATERIAL COMPOSITION List all components and contaminants, including PCB's, and any applicable F-Listed and underlying Hazardous Constituents.

CAS #	COMPONENT (Be as descriptive as possible. Chemical names, as well as generic descriptions. e.g., 'sludge', 'paint solids', 'water' etc. are acceptable)'	CONCENTRATION	RANGE
64742489	NAPHTHA (PETROLEUM), HYDROTREATED HEAVY	= 100 %	100.0 %
			RANGE TOTAL MUST EQUAL AT LEAST 100%

3. MATERIAL COMPOSITION / UNDERLYING HAZARDOUS CONSTITUENTS

CAS #	COMPONENT (Be as descriptive as possible. Chemical names, as well as generic descriptions. e.g., 'sludge', 'paint solids', 'water' etc. are acceptable)'	CONCENTRATION	RANGE
			RANGE TOTAL MUST EQUAL AT LEAST 100%

HAZARDOUS WASTE PROFILE SHEET (Continued)

WASTE PROFILE NO.
ER15-0524A v1

4. SHIPPING INFORMATION

DOT HAZARDOUS MATERIAL? ☐ YES ☒ NO

PROPER SHIPPING NAME

HAZARD CLASS	U.N. or N.A. NO.	PACKING GROUP

ADDITIONAL DESCRIPTION
SAFETY-KLEEN SOLVENT BLDG 280HY (NON-REG)

METHOD OF SHIPMENT ☐ BULK ☒ DRUM ☐ OTHER

EMERGENCY RESPONSE GUIDE EDITION (YR)	EMERGENCY RESPONSE NUMBER

5. SPECIAL HANDLING INFORMATION

6. GENERATOR CERTIFICATION

☒ CHEMICAL ANALYSIS (ATTACH TEST RESULTS) ☐ USER KNOWLEDGE (ATTACH SUPPORTING DOCUMENTS)

EXPLAIN HOW AND WHY THESE DOCUMENTS COMPLY WITH RCRA REQUIREMENTS

LAB GT158017, MSDS, CLINS #990200

SAFETY-KLEEN SOLVENT BLDG 280HY (NON-REG)

CERTIFICATION

I, _____ HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS IS TO THE BEST OF MY KNOWLEDGE AN ACCURATE REPRESENTATION OF THE WASTE TURNED IN TO THE DRMO. ALL KNOWN OR SUSPECTED HAZARDS HAVE BEEN DISCLOSED.

_____ _____

Signature of Generator's Representative Date

Bldg 280 Hydraulic Shop
Safety Kleen Solvent Bath

Matrix: Liquid | Client: R&R Environmental Inc. | Collector: Client
Sampled: 12/22/2014 12:30 | Site:
Sample #: 350914-001 | Client Sample #: GT158017 | Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Method: EPA 1010 NELAC	**Prep Method: Method**						**QCBatchID:**	
Ignitability	145	1			°F	12/26/14	hanhkhong	
Method: EPA 6010B NELAC	**Prep Method: EPA 1311**						**QCBatchID: QC1152056**	
Antimony	ND	25	0.4	1.25	mg/L	12/29/14	kedy	
Arsenic	ND	25	0.1	1.25	mg/L	12/29/14	kedy	
Barium	ND	25	0.025	2.5	mg/L	12/29/14	kedy	
Beryllium	ND	25	0.025	0.125	mg/L	12/29/14	kedy	
Cadmium	ND	25	0.025	1.25	mg/L	12/29/14	kedy	
Chromium	ND	25	0.05	1.25	mg/L	12/29/14	kedy	
Lead	ND	25	0.1	1.25	mg/L	12/29/14	kedy	
Nickel	ND	25	0.025	0.5	mg/L	12/29/14	kedy	
Selenium	ND	25	0.1	1.25	mg/L	12/29/14	kedy	
Silver	ND	25	0.025	1.25	mg/L	12/29/14	kedy	
Thallium	ND	25	0.075	1.25	mg/L	12/29/14	kedy	
Method: EPA 6010B NELAC	**Prep Method: EPA 3050B**						**QCBatchID: QC1152062**	
Silver	ND	1	0.13	0.5	mg/Kg	12/29/14	kedy	
Method: EPA 7470A NELAC	**Prep Method: EPA 1311/7470A**						**QCBatchID: QC1152068**	
Mercury	ND	10	0.04	0.1	mg/L	12/29/14	JParedes	
Method: EPA 8260B NELAC	**Prep Method: EPA 5035**						**QCBatchID: QC1152030**	
1,1,1,2-Tetrachloroethane	ND	500	120	2500	ug/Kg	12/26/14	nicollez	
1,1,1-Trichloroethane	ND	500	75	2500	ug/Kg	12/26/14	nicollez	
1,1,2,2-Tetrachloroethane	ND	500	145	2500	ug/Kg	12/26/14	nicollez	
1,1,2-Trichloroethane	ND	500	110	2500	ug/Kg	12/26/14	nicollez	
1,1,2-Trichlorotrifluoroethane	ND	500	370	2500	ug/Kg	12/26/14	nicollez	
1,1-Dichloroethane	ND	500	115	2500	ug/Kg	12/26/14	nicollez	
1,1-Dichloroethene	ND	500	90	2500	ug/Kg	12/26/14	nicollez	
1,1-Dichloropropene	ND	500	105	2500	ug/Kg	12/26/14	nicollez	
1,2,3-Trichlorobenzene	ND	500	90	2500	ug/Kg	12/26/14	nicollez	
1,2,3-Trichloropropane	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
1,2,4-Trichlorobenzene	ND	500	165	2500	ug/Kg	12/26/14	nicollez	
1,2,4-Trimethylbenzene	ND	500	140	2500	ug/Kg	12/26/14	nicollez	
1,2-Dibromo-3-chloropropane	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
1,2-Dibromoethane	ND	500	60	2500	ug/Kg	12/26/14	nicollez	
1,2-Dichlorobenzene	ND	500	90	2500	ug/Kg	12/26/14	nicollez	
1,2-Dichloroethane	ND	500	70	2500	ug/Kg	12/26/14	nicollez	
1,2-Dichloropropane	ND	500	170	2500	ug/Kg	12/26/14	nicollez	
1,3,5-Trimethylbenzene	ND	500	115	2500	ug/Kg	12/26/14	nicollez	
1,3-Dichlorobenzene	ND	500	105	2500	ug/Kg	12/26/14	nicollez	
1,3-Dichloropropane	ND	500	95	2500	ug/Kg	12/26/14	nicollez	
1,4-Dichlorobenzene	ND	500	120	2500	ug/Kg	12/26/14	nicollez	
2,2-Dichloropropane	ND	500	95	2500	ug/Kg	12/26/14	nicollez	
2-Butanone (MEK)	ND	500	360	50000	ug/Kg	12/26/14	nicollez	
2-Chloroethyl Vinyl Ether	ND	500	150	2500	ug/Kg	12/26/14	nicollez	
2-Chlorotoluene	ND	500	125	2500	ug/Kg	12/26/14	nicollez	
4-Chlorotoluene	ND	500	110	2500	ug/Kg	12/26/14	nicollez	
4-Isopropyltoluene	ND	500	135	2500	ug/Kg	12/26/14	nicollez	
4-Methyl-2-pentanone (MIBK)	ND	500	85	2500	ug/Kg	12/26/14	nicollez	
Acetone	ND	500	5000	50000	ug/Kg	12/26/14	nicollez	
Allyl Chloride	ND	500	70	2500	ug/Kg	12/26/14	nicollez	
Benzene	ND	500	90	2500	ug/Kg	12/26/14	nicollez	

Matrix: Liquid **Client:** R&R Environmental Inc. **Collector:** Client
Sampled: 12/22/2014 12:30 **Site:**
Sample #: 350914-001 **Client Sample #:** GT158017 **Sample Type:**

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Bromobenzene	ND	500	150	2500	ug/Kg	12/26/14	nicollez	
Bromochloromethane	ND	500	90	2500	ug/Kg	12/26/14	nicollez	
Bromodichloromethane	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
Bromoform	ND	500	95	2500	ug/Kg	12/26/14	nicollez	
Bromomethane	ND	500	110	2500	ug/Kg	12/26/14	nicollez	
Carbon Tetrachloride	ND	500	90	2500	ug/Kg	12/26/14	nicollez	
Chlorobenzene	ND	500	90	2500	ug/Kg	12/26/14	nicollez	
Chlorodibromomethane	ND	500	95	2500	ug/Kg	12/26/14	nicollez	
Chloroethane	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
Chloroform	ND	500	85	2500	ug/Kg	12/26/14	nicollez	
Chloromethane	ND	500	105	2500	ug/Kg	12/26/14	nicollez	
cis-1,2-Dichloroethene	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
cis-1,3-dichloropropene	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
cis-1,4-dichloro-2-butene	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
Dibromomethane	ND	500	105	2500	ug/Kg	12/26/14	nicollez	
Dichlorodifluoromethane	ND	500	115	2500	ug/Kg	12/26/14	nicollez	
Di-isopropyl ether (DIPE)	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
Ethylbenzene	ND	500	115	2500	ug/Kg	12/26/14	nicollez	
Ethyl-tertbutylether (ETBE)	ND	500	150	2500	ug/Kg	12/26/14	nicollez	
Hexachlorobutadiene	ND	500	210	2500	ug/Kg	12/26/14	nicollez	
Isopropylbenzene	ND	500	125	2500	ug/Kg	12/26/14	nicollez	
m and p-Xylene	ND	500	190	2500	ug/Kg	12/26/14	nicollez	
Methylene chloride	ND	500	105	2500	ug/Kg	12/26/14	nicollez	
Methyl-t-butyl Ether (MTBE)	ND	500	85	2500	ug/Kg	12/26/14	nicollez	
Naphthalene	ND	500	80	2500	ug/Kg	12/26/14	nicollez	
N-butylbenzene	ND	500	125	2500	ug/Kg	12/26/14	nicollez	
N-propylbenzene	ND	500	110	2500	ug/Kg	12/26/14	nicollez	
o-Xylene	ND	500	95	2500	ug/Kg	12/26/14	nicollez	
Sec-butylbenzene	ND	500	140	2500	ug/Kg	12/26/14	nicollez	
Styrene	ND	500	65	2500	ug/Kg	12/26/14	nicollez	
t-Butyl alcohol (TBA)	ND	500	4400	5000	ug/Kg	12/26/14	nicollez	
Tert-amylmethylether (TAME)	ND	500	50	2500	ug/Kg	12/26/14	nicollez	
Tert-butylbenzene	ND	500	170	2500	ug/Kg	12/26/14	nicollez	
Tetrachloroethene	ND	500	115	2500	ug/Kg	12/26/14	nicollez	
Toluene	ND	500	85	2500	ug/Kg	12/26/14	nicollez	
trans-1,2-dichloroethene	ND	500	95	2500	ug/Kg	12/26/14	nicollez	
trans-1,3-dichloropropene	ND	500	90	2500	ug/Kg	12/26/14	nicollez	
trans-1,4-dichloro-2-butene	ND	500	100	2500	ug/Kg	12/26/14	nicollez	
Trichloroethene	ND	500	115	2500	ug/Kg	12/26/14	nicollez	
Trichlorofluoromethane	ND	500	115	2500	ug/Kg	12/26/14	nicollez	
Vinyl Chloride	ND	500	70	2500	ug/Kg	12/26/14	nicollez	
Xylenes (Total)	ND	500	190	2500	ug/Kg	12/26/14	nicollez	

Surrogate	% Recovery	Limits	Notes
1,2-Dichloroethane-d4 (SUR)	*87*	*70-145*	
4-Bromofluorobenzene (SUR)	*144*	*70-145*	*Internal standard recovery did not meet m*
Dibromodifluoromethane (SUR)	*95*	*70-145*	
Toluene-d8 (SUR)	*97*	*70-145*	

Method: EPA 8270C NELAC **Prep Method:** Method **QCBatchID:** QC1152072

N-Nitrosodimethylamine (NDMA)	ND	20000	440000	5e+006	ug/Kg	12/26/14	qnguyen	
Phenol	ND	200001	.3e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Bis(2-chloroethyl) Ether	ND	20000	42e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2-Chlorophenol	ND	200001	.3e+006	5e+006	ug/Kg	12/26/14	qnguyen	

Matrix: Liquid	**Client:** R&R Environmental Inc.			**Collector:** Client	
Sampled: 12/22/2014 12:30	**Site:**				
Sample #: 350914-001	**Client Sample #:** GT158017			**Sample Type:**	

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
1,3-Dichlorobenzene	ND	20000	36e+006	5e+006	ug/Kg	12/26/14	qnguyen	
1,4-Dichlorobenzene	ND	20000	22e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benzyl alcohol	ND	20000	1.5e+006	5e+006	ug/Kg	12/26/14	qnguyen	
1,2-Dichlorobenzene	ND	20000	28e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2-Methylphenol (o-Cresol)	ND	20000	1.6e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Bis(2-chloroisopropyl) Ether	ND	20000	38e+006	5e+006	ug/Kg	12/26/14	qnguyen	
4-Methylphenol (p-Cresol)	ND	20000	88e+006	8e+006	ug/Kg	12/26/14	qnguyen	
N-Nitrosodi-n-propylamine (NDPA)	ND	20000	72e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Hexachloroethane	ND	20000	34e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Nitrobenzene	ND	20000	2.3e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Isophorone	ND	20000	1.8e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2-Nitrophenol	ND	20000	58e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2,4-Dimethylphenol	ND	20000	34e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Bis(2-chloroethoxy)methane	ND	20000	1.6e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benzoic acid	ND	20000	6e+006	2.4e+007	ug/Kg	12/26/14	qnguyen	
2,4-Dichlorophenol	ND	20000	62e+006	5e+006	ug/Kg	12/26/14	qnguyen	
1,2,4-Trichlorobenzene	ND	20000	58e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Naphthalene	ND	20000	16e+006	5e+006	ug/Kg	12/26/14	qnguyen	
4-Chloroaniline	ND	20000	36e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Hexachlorobutadiene	ND	20000	24e+006	5e+006	ug/Kg	12/26/14	qnguyen	
4-Chloro-3-methylphenol	ND	20000	26e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2-Methylnaphthalene	ND	20000	980000	5e+006	ug/Kg	12/26/14	qnguyen	
Hexachlorocyclopentadiene	ND	20000	1.5e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2,4,6-Trichlorophenol	ND	20000	32e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2,4,5-Trichlorophenol	ND	20000	66e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2-Chloronaphthalene	ND	20000	72e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2-Nitroaniline	ND	20000	56e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Dimethyl phthalate	ND	20000	1.4e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Acenaphthylene	ND	20000	66e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2,6-Dinitrotoluene	ND	20000	64e+006	5e+006	ug/Kg	12/26/14	qnguyen	
3-Nitroaniline	ND	20000	32e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Acenaphthene	ND	20000	58e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2,4-Dinitrophenol	ND	20000	640000	5e+006	ug/Kg	12/26/14	qnguyen	
Dibenzofuran	ND	20000	54e+006	5e+006	ug/Kg	12/26/14	qnguyen	
4-Nitrophenol	ND	20000	96e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2,4-Dinitrotoluene	ND	20000	32e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Diethyl phthalate	ND	20000	38e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Fluorene	ND	20000	1.4e+006	5e+006	ug/Kg	12/26/14	qnguyen	
4-Chlorophenyl phenyl ether	ND	20000	52e+006	5e+006	ug/Kg	12/26/14	qnguyen	
4-Nitroaniline	ND	20000	92e+006	5e+006	ug/Kg	12/26/14	qnguyen	
2-Methyl-4,6-dinitrophenol	ND	20000	22e+006	5e+006	ug/Kg	12/26/14	qnguyen	
N-Nitrosodiphenylamine	ND	20000	72e+006	5e+006	ug/Kg	12/26/14	qnguyen	
1,2-Diphenylhydrazine	ND	20000	340000	5e+006	ug/Kg	12/26/14	qnguyen	
4-Bromophenyl phenyl ether	ND	20000	58e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Hexachlorobenzene	ND	20000	46e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Pentachlorophenol	ND	20000	940000	5e+006	ug/Kg	12/26/14	qnguyen	
Phenanthrene	ND	20000	980000	5e+006	ug/Kg	12/26/14	qnguyen	
Anthracene	ND	20000	1.1e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Di-n-butyl phthalate	ND	20000	2.9e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Fluoranthene	ND	20000	88e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benzidine	ND	20000	72e+007	2.4e+007	ug/Kg	12/26/14	qnguyen	
Pyrene	ND	20000	1.6e+006	5e+006	ug/Kg	12/26/14	qnguyen	

Matrix: Liquid | Client: R&R Environmental Inc. | Collector: Client
Sampled: 12/22/2014 12:30 | Site:
Sample #: 350914-001 | Client Sample #: GT158017 | Sample Type:

Analyte	Result	DF	MDL	RDL	Units	Analyzed	By	Notes
Butylbenzyl Phthalate	ND	20000	64e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benz(a)anthracene	ND	20000	04e+006	5e+006	ug/Kg	12/26/14	qnguyen	
3,3'-Dichlorobenzidine	ND	20000	36e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Chrysene	ND	20000	960000	5e+006	ug/Kg	12/26/14	qnguyen	
Bis(2-ethylhexyl) phthalate	ND	20000	18e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Di-n-octyl phthalate	ND	20000	02e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benzo(b)fluoranthene	ND	20000	72e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benzo(k)fluoranthene	ND	20000	2.2e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benzo(a)pyrene	ND	20000	34e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Indeno(1,2,3-cd)pyrene	ND	20000	24e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Dibenz(a,h)anthracene	ND	20000	56e+006	5e+006	ug/Kg	12/26/14	qnguyen	
Benzo(g,h,i)perylene	ND	20000	56e+006	5e+006	ug/Kg	12/26/14	qnguyen	

Surrogate	% Recovery	Limits	Notes
2,4,6-Tribromophenol (SUR)	*00*	-	
2-Fluorobiphenyl (SUR)	*00*	-	
2-Fluorophenol (SUR)	*00*	-	*extra large dilution*
Nitrobenzene-d5 (SUR)	*00*	-	
p-Terphenyl (SUR)	*00*	-	
Phenol-d5 (SUR)	*00*	-	

Method: EPA 9012A NELAC | Prep Method: Method | QCBatchID: QC1152079

Amenable Cyanide	0.06 J	1	0.02	0.5	mg/Kg	12/26/14	soheir
Total Cyanide	0.46 J	1	0.02	0.5	mg/Kg	12/26/14	soheir

MSDS: Proparacaine Hydrochloride Ophthalmic Solution, USP 0.5% Sterile

Manufacturer: Akorn
1925 W. Field Court Suite 300
Lake Forest, IL 60045

Contact Telephone: 1-800-932-5676
Email: customer.service@akorn.com

Section 1 - IDENTIFICATION

Common/Trade Name: Proparacaine Hydrochloride Ophthalmic Solution, USP 0.5%

Chemical Names: 2-(Diethylamino)ethyl 3-amino-4-propoxybenzoate monohydrochloride

Chemical Formula: $C_{16}H_{26}N_2O_3 \bullet HCl$

Category: Prescription Only.

Section 2 – HAZARD(S) IDENTIFICATION

Routes of Entry: For topical ophthalmic use.

Not for injection.

Carcinogenicity: Does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Additional Hazard Information:

Eye: May cause temporary stinging, burning, and conjunctival redness. In the unlikely event irritation occurs it is most likely several hours after installation. After installation do not rub eye. The surface of the eye is in sensitive and can be scratched without feeling it. May cause hypersensitivity. Although exceedingly rare, ophthalmic applications of proparacaine can cause central nervous system stimulation followed by depression. A rare, severe, immediate allergic corneal reaction has been reported, characterized by acute diffuse filament formation and/or sloughing of large areas of dead skin, swelling and inflammation of the iris.

Skin: May cause irritation and hypersensitivity in some individuals. Allergic contact dermatitis with drying and fissuring of the fingertips can occur.

Inhalation: May cause irritation and hypersensitivity

Ingestion: May cause irritation and hypersensitivity. Moderately toxic by ingestion; However, very large quantities may induce yawning, restlessness, dizziness, blurred vision, nausea, vomiting, muscle twitching, convulsions, respiratory failure, cardiac arrhythmias or arrest and coma

Target Organs: Central nervous system.

Chronic Effects: Prolonged use results in diminished duration of anesthesia and retarded healing. This may cause the drug to be used more frequently creating a "vicious circle". Subsequent corneal infection and/or corneal opacification with accompanying permanent visual loss or corneal perforation may occur. May cause hypersensitivity in some individuals.

Medical Conditions Aggravated by Long Term Exposure:

Individuals sensitive to ester-type local anesthetics (e.g. butacaine, butamben, chloroprocaine, tetracaine, propoxycaine) or to PABA may be hypersensitive to proparacaine. It is not known if proparacaine can cause fetal harm or impair reproductive capacity. This medication should only be given to pregnant women if clearly needed. It is not known if proparacaine is excreted in human milk, so caution should be exercised when administering this medication.

Section 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS#	% Content
Proparacaine HCL	5875-06-9	0.5
Benzalkonium Chloride	8001-54-5	0.01

Inactive ingredients: Hydrochlorid Acid and/or Sodium Hydroxide, Glycerin, Purified Water

Section 4 – FIRST AID MEASURES

Eyes: Flush for 20 minutes with copious quantities of water. Seek medical attention.

Skin: Remove contaminated clothing. Flush area with large amounts of water for 20 minuets. Seek medical attention.

Inhalation: Remove to fresh air and keep patient at rest. If breathing stops use artificial respiration. Seek medical attention immediately.

Ingestion: Wash out mouth and drink plenty of water and bland fluids. The use of an emetic drug and/or gastric lavage is advisable. Seek medical attention immediately.

Note to Physicians: Additional details are available on the package insert or in the Physicians Desk Reference.

Section 5 – FIRE FIGHTING MEASURES

Flash Point:	NE
Auto ignition:	NA
Lower Explosion Limit:	NA
Upper Explosion Limit:	NA

Suitable Extinguishing Media: Dry chemical, carbon dioxide, halon, water fog and foam for surrounding materials. Water spray will froth if sprayed into the burning material.
Caution: Carbon dioxide will displace air in confined spaces and may cause oxygen deficient atmosphere.

Unsuitable Extinguishing Media: NA

Hazardous Combustion Particles: NA

Fire Fighting Instructions: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire exposed containers cool. Do not spray water into the burning material.

Section 6 – ACCIDENTAL RELEASE MEASURES

Clean-Up: Use personal protective equipment. Contain the spill to prevent drainage into sewers, drains or streams. Absorb liquid with clay absorbent, absorbent pads or paper towels. Shovel, scoop up, sweep or containerize spilled material. Dispose of material according to Federal, State and Local regulations.

Personal Precautions: Use personal protective equipment recommended in Section 8 of this document and isolate the hazard area.

Environmental Precautions: It is recommended to prevent spilled or leaking material from entering waterways. Minimize the use of water to prevent environmental contamination.

Methods of Containment: Absorb material with suitable materials such as clay absorbent or absorbent pads for aqueous solutions.

Section 7 – HANDLING AND STORAGE

General Handing: Avoid contact with product and use caution to prevent puncturing containers. No special protective equipment or procedures are required in the clinical or home environment.

Storage Conditions: Refrigerate between 2°C and 8°C (36°F and 46°F). Keep bottle tightly closed. Store in carton until it is empty to protect from light. If solution shows more than a faint yellow color, it should not be used.

Section 8 –EXPOSURE CONTROLS / PERSONAL PROTECTIVE

Engineering Controls: In the manufacturing plant, provide adequate ventilation for the raw material handling and compounding process, which will maintain the dust and vapor, levels below the TLV, STEL, and PEL values for the ingredients. Ventilation fans should be explosion proof. Use adequate personal protective equipment.

Personal Protective Equipment

Eye Protection: Wear chemical splash goggles or safety glasses.

Skin Protection: Thick impermeable gloves and protective clothing.

Respiratory Protection: NIOSH approved respirator, with organic vapor, acid gas and HEPA filter recommended for handling raw materials. **Warning: Do not use air-purifying respirators in oxygen-depleted environments**. No respiratory protection is required in the clinical or home environment.

Other: None.

Ventilation: Recommended.

Contaminated Equipment: Wash contaminated clothing separately. Wash contaminated equipment with soap and water. Release rinse water into an approved wastewater system or according to Federal, State and Local regulations.

Section 9 – PHYSICAL/CHEMICAL CHARACTERISTICS

Physical Form/ Appearance:	Clear, colorless aqueous solution
Melting Point/Melting Range:	NA
Freezing Point:	NA
Boiling Point:	NA
Flash Pont:	NA
Auto-ignition Temperature:	NA
Evaporation Rate:	NA
Flammability:	Nonflammable, noncombustible.
Vapor Pressure:	NA
Relative Vapor Density:	NA
Specific Gravity:	1.0
pH:	NA
Solubility:	Freely soluble in water
Latex Free:	NA
Physical State:	Liquid
Odor:	Odorless.
Partition Coefficient:	NA
%Volatile:	<1
Volatile Organic Compounds(%):	NA

Section 10 – STABILITY AND REACTIVITY

Reactivity:	NA
Chemical Stability:	Stable.
Possibility of Hazardous Reactions:	NA
Conditions to Avoid:	Extreme heat or cold.
Hazardous Polymerization:	Should not occur.
Hazardous Decomposition Product:	NA
Incompatibility:	This product has the incompatibilities of water e.g. strong acids, bases, alkali metals, alkali hydrides and silver preparations.

Section 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity:

Proparacaine HCl CAS# 5875-06-09

May cause irritation to eyes, skin and respiratory tract. Can cause hypersensitivity (anaphylactic) in some individuals. Effects include excitation of the central nervous system (yawning, restlessness, dizziness, blurred vision, nausea, vomiting, muscle twitching, convulsions), respiratory failure, cardiac arrhythmias, cardiac arrest and coma. Should be avoided by individuals sensitive to other ester-type local anesthetics (e.g. benzocaine, butacaine, butamben, chlorocaine, tetracaine, porpoxycaine) or PABA. Subcutaneous-mouse LD_{50} 64mg.kg, Intravenous-mouse LD_{50} 3371 micograms/kg.

Glycerin CAS# 56-81-5

May cause irritation to eyes and skin. Repeated or prolonged exposure may cause dermatitis and eye conjunctivitis. Inhalation is not likely due to low evaporation rate, but fumes may cause irritation and defatting of the tissues. Ingestion can cause headache, restlessness, insomnia, dizziness, vomiting, diarrhea and fever. Large doses can cause hemolysis, hemoglobinuria, hyperglycemia, glycosuria, renal failure, convulsions, narcosis and paralysis. Oral-rat LD_{50} 12,600mg/kg. Decomposition releases corrosive fumes of acrolein. Avoid open flame and extreme heat. Incompatibilities include strong acids, strong oxidizers, metal oxides and metal hydrides.

Chronic Effects:

Organ Systems:	Central nervous system.
Mutagenicity:	NA
Reproductive Effects:	NA
Developmental Effects:	NA

Section 12 – ECOLOGICAL INFORMATION

Ecotoxicity :	Data not yet available.
Biodegradable :	Short term products of biodegradation are not likely. No data available on the long term degradation of the product.
Bioaccumulation :	No applicable bioaccumulation is expected in the environment.
Environmental Overview:	Product administered to patients presents a negligible impact on the environment.

Section 13 – DISPOSAL INFORMATION

Disposal Procedure: Dispose of waste in accordance to all applicable laws and regulations. Do not mix with other substances. Contact your state or local government environmental and/or sanitation department for guidance on disposal.

EPA Designations: RCRA Hazardous Waste: Not Listed

SARA Title III: Not Listed

Section 14 – TRANSPORT INFORMATION

UN/NA Nimber: NA

U.S. DOT Hazard Class: Not classifies as hazardous by DOT regulations

Section 15 – REGULATORY INFORMATION

EPA Designations: RCRA Hazardous Waste (40 CFR 261.33) Not Listed

FDA Designations: Prescription only medication.
NDC No. 17478-263-12 (15 ml)

OSHA Designations: (29 CFR 1910.1000, Table Z) Not Listed

CALIFORNIA PROPOSITION 65: Not Listed

Section 16 – OTHER INFORMATION

Date of preparation or last revision: 10-13

Key to Abbreviations:
NA = Not Available

BAUSCH & LOMB

Pharmaceutical Division

MATERIAL SAFETY DATA SHEET

Issued:	09/07/94	Prepared by:	Gary Wong
Revised:	01/25/01		Manager EHS
Revision:	01	Core No. 049	

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cyclopentolate Hydrochloride Ophthalmic Solution USP, 1.0%
Generic Name: Same
NDC No. 24208-735-01 (2 ml, box of 12)
24208-735-06 (15 ml)

Legal Category: Prescription only medicine, filled inside plastic bottle suitable for dispensing, and overpacked inside a cardboard carton.

Drug Composition: Anti-cholinergic: Ciliary muscle paralysis agent (cycloplegic; mydriatic) in a borate buffered topical ophthalmic solution.

BAUSCH & LOMB PHARMACEUTICALS, INC.
8500 Hidden River Parkway
Tampa, FL 33637

Information:	(800) 323-0000	(M-F) 8am-5pm	EST
Emergency:	(800) 227-1427	24 hrs	

2. COMPOSITION/INFORMATION ON INGREDIENTS

Description	CAS #	TLV (mg/m^3)	PEL(mg/m^3)	% Content
Cyclopentolate HCL	5870-29-1	NE	NE	1.0
Boric Acid	10043-35-3	NE	NE	$\geq$1

Ingredients <1% - Potassium Chloride, Edetate Disodium, Benzalkonium Chloride

3. HAZARDS IDENTIFICATION

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EMERGENCY OVERVIEW

Plastic bottle packed in a cardboard box. Clear, colorless, odorless solution. For eyes only. Do not engage in hazardous activity while under the influence. May cause temporary light sensitivity. Avoid mouth and skin contact.

****

POTENTIAL HEALTH HAZARDS

Carcinogenicity: **(NTP)** No **(IARC)** No **(OSHA)** No

Eye: This is an ophthalmic solution. May cause adverse reactions including intraocular pressure, burning sensation, blurred vision, irritation, increased blood inflow (hyperemia), inflammation (conjunctivitis), inflammation of the eyelid (blepharoconjunctivitis), cellular deposits on the back of the cornea (punctuate carotids) and adhesion of parts (synechiae). This preparation may cause central nervous system disturbances. CNS disturbances are more likely in young, premature or small infants. Do not use concentrations higher than 0.5% in very small children. Children with spastic paralysis or brain damage are more susceptible to cyclopentolate. Patients should not drive or engage in other hazardous activity while pupils are dilated. Patients may experience sensitivity to light (photophobia) and should protect eyes in bright illumination during dilation. Complete recovery of accommodation takes 6 to 24 hours. Complete recovery from mydriasis in some individuals may take several days.

Skin: May cause irritation and repeated or prolonged contact can induce hypersensitivity in some individuals. Toxic systemic effects may be induced by skin contact.

Ingestion: This is not an oral solution. Toxic by ingestion. See chronic effects. Ophthalmic administration of this drug may cause feeding intolerance in neonates. It is recommended that feeding be withheld for four (4) hours after examination.

Inhalation: Aspiration of solution may cause irritation of the respiratory tract and induce systemic effects. Vapor inhalation poses little hazard as this is an aqueous solution.

Chronic Effects: Systemic toxicity effects include psychotic reactions and behavioral disturbances. These reactions include ataxia, incoherent speech, restlessness, hallucinations, hyperactivity, seizures, disorientation as to time and place and failure to recognize people. This drug produces reactions similar to other anticholinergic drugs, but the central nervous system manifestations are more

common. Other toxic manifestations of anticholinergic drugs are skin rash, abdominal distention in infants, unusual drowsiness, tachycardia, hyperpyrexia, vasodilation, urinary retention, diminished gastric motility and decreased secretion in salivary and sweat glands, pharynx, bronchi and nasal passages. Sever manifestations of toxicity include coma, medullary paralysis and death.

Target Organs: Eyes, central nervous system, heart, digestive tract and vascular system.

Medical Conditions Aggravated by Long Term Exposure: Hypersensitivity to cyclopentolate or any component of the preparation.

4. FIRST AID MEASURES

Eyes: Rinse immediately with copious amounts of water for at least 20 minutes. Contact a physician.

Skin: Remove all contaminated clothing and wash skin with copious amounts of water for at least 20 minutes. Contact physician if skin becomes irritated.

Ingestion: Wash out mouth and drink plenty of water and bland fluids. Do not give anything to an unconscious person. Contact physician.

Inhalation: Remove person to fresh air, and if breathing stops, use artificial respiration. Contact physician.

Note to Physicians:

- Cyclopentolate may interfere with the antiglaucoma and miotic actions of ophthalmic cholinesterase inhibitors.
- Cyclopentolate is contraindicated in case of narrow angle glaucoma or anatomical narrow angles are present.
- Cyclopentolate may interfere with the antiglaucoma action of carbachol or pilocarpine; also concurrent use of these medications may antagonize the antiglaucoma and miotic actions of ophthalmic cholinesterase inhibitors.
- It is not known whether this drug is excreted in the milk of nursing mothers, so caution should be exercised when prescribing cyclopentolate hydrochloride.
- CNS disturbances are more likely in young, premature or small infants. Children with spastic paralysis or brain damage are more susceptible to cyclopentolate.

5. FIRE FIGHTING MEASURES

Flammable Properties: Flash point: NE Method: NE

Hazardous Products: Toxic fumes, carbon oxides, nitrogen oxides.

Extinguishing Media: Dry chemical, carbon dioxide, halon, water fog and foam for

surrounding materials. Water spray will froth if sprayed into the burning material.

Fire Fighting Instructions: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool. Do not spray water into the burning material.

6. ACCIDENTAL RELEASE MEASURES

Large/Small Spills: Use personal protective equipment. Contain the spill to prevent drainage into sewers, drains or streams. Use absorbent material to solidify the spill. Shovel or scoop up solidified waste. Dispose of material according to Federal, State and Local regulations.

7. HANDLING AND STORAGE

Handling: Avoid contact with product and use caution to prevent puncturing containers. No special protective equipment or procedures are required in the clinical or home environment.

Storage: Store product upright in original containers with the cap tightly closed at a controlled room temperature 15^0-30^0 C (59^0- 86^0 F). **KEEP THIS AND ALL DRUGS OUT OF THE REACH OF CHILDREN.**

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Controls: In the manufacturing plant, provide adequate ventilation for the raw material handling and compounding process which will maintain the dust and vapor levels below the TLV, STEL, and PEL values for the ingredients. Ventilation fans should be explosion proof. Use adequate personal protective equipment e.g. NIOSH-approved respirators, goggles or safety glasses, gloves and protective clothing. Ensure training in the handling of chemical material and use current Material Safety Data Sheets.

Eye Protection: (29 CFR 1910.133) Recommend goggles or chemical safety glasses.

Skin Protection: Thick impermeable gloves and protective clothing.

Respiratory Protection: (29 CFR 1910.134) NIOSH approved respirator, with organic vapor, acid gas and HEPA filter recommended for handling raw materials. **Warning: Do not use air purifying respirators in oxygen depleted environments**. No respiratory protection is required in the clinical or home environment.

Other: None

Ventilation: Recommended

Contaminated Equipment: Wash contaminated clothing separately. Wash equipment with soap and water. Release rinse water into an approved wastewater system or according to Federal, State and Local regulations.

9. CHEMICAL & PHYSICAL PROPERTIES

Appearance & Odor:	Clear, colorless, odorless solution		
Boiling Point:	NE	Evaporation Rate:	NE
Specific Gravity:	1.0	Vapor Density:	NE
Vapor Pressure:	NE	Viscosity:	NE
Water Solubility:	Soluble	Percent Volatile by Volume:	<1

10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Conditions to avoid: Extreme heat or cold.

Incompatibility: This product has the incompatibilities of water e.g. strong acids, bases, alkali metals, alkali hydrides and silver preparations.

Hazardous Decomposition Products: Emits toxic fumes.

Hazardous Polymerization: Should not occur.

11. TOXICOLOGY INFORMATION

Summary of Risks: Toxicological information refers to the raw materials of the product. Concentrations and toxicological effects are substantially reduced in the product. For more detailed information see MSDS on chemical material.

CAS #

5870-29-1 **Cyclopentolate HCL**

May cause eye, skin and respiratory tract irritation. May also cause a burning sensation in the eye. Induces paralysis of the ciliary muscle of the eye preventing the adjustment of the eye to light (cycloplegia) and dilates the pupil of the eye (mydriasis). Cyclopentolate is an anti-cholinergic agent which affects the nervous system. Hypersensitivity (anaphylactic) may be observed in some individuals. Toxicity induces clumsiness, weakness, drowsiness, confusion, hallucinations, slurred speech, rapid heartbeat, drug fever and flushed face. Oral-mouse LD_{50} 960 mg/kg, IV-mouse LD_{50} 84 mg/kg.

10043-35-3 **Boric Acid**

May cause irritation to the eyes, skin, respiratory tract and digestive system. Inhalation may cause coughing and chest discomfort. Dusts may irritate the skin. Harmful quantities may be absorbed through broken skin but is unlikely with intact skin. Ingestion may produce upset stomach and vomiting; large quantities may be fatal. Repeated or prolonged contact may cause hypersensitization (anaphylactic) in some individuals, central nervous system stimulation and erythematous flush (diffuse red skin rash). Oral-rat LD_{50}2660 mg/kg.

12. ECOLOGICAL INFORMATION

Chemical Fate Information: Product administered to patients presents a negligible impact on the environment.

13. DISPOSAL INFORMATION

Dispose of material according to Federal, State, and Local regulations. The method typically used is incineration.

EPA Designations: RCRA Hazardous Waste: Not Listed

SARA Title III: Not Listed

14. TRANSPORTATION INFORMATION

Transportation Data: Not classified as hazardous by DOT regulations.

15. REGULATORY INFORMATION

DOT Designations: Not classified as hazardous by DOT regulations.

EPA Designations: RCRA Hazardous Waste
(40 CFR 261.33) Not Listed

FDA Designations: Prescription only medication.
NDC No. 24208-735-01 (2 ml, box of 12)
NDC No. 24208-735-06 (15 ml)

OSHA Designations: (29 CFR 1910.1000, Table Z)
Not Listed

SARA Title III: Not listed under Section 313 of Toxic Release Reporting.

CALIFORNIA PROPOSITION 65: Not Listed

16. OTHER INFORMATION

None

The information contained herein is furnished without warranty of any kind. The above information is believed to be correct but does not purport to be all-inclusive and should be used only as a guide. Users should make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.

NE- Not Established
< - Less Than
> - Greater Than

HAZARDOUS WASTE PROFILE SHEET

NOTE: Explosives, Shock Sensitive, Pyrophoric, Radioactive, and Etiological Waste are not normally accepted by the DRMO
Contact your DRMO for further guidance if your waste meets any of these categories.

Part I

A. GENERAL INFORMATION
1. GENERATORS NAME HOLLOMAN AIR FORCE BASE

WASTE PROFILE NO.
LA14-015LA v1

2. FACILITY ADDRESS
241 ARKANSAS AVENUE

3. ZIP CODE
88330

4. GENERATOR USEPA ID
NM6572124422

5. GENERATOR STATE ID

HOLLOMAN AFB NM United States

ORGANIZATION NAME	SHOP NAME	OFFICE SYMBOL
49 MEDICAL GP	CLINIC LAB	49 MED GRP/BLDG 15

6. TECHNICAL CONTACT	7. TITLE	8. PHONE
JOHN HAMANN	Environmental Contact	(575) 572-6644

B. WASTE INFORMATION
1. NAME OF WASTE: USED WRIGHT STAINING KIT LDR F CODES:15 , UHC CODES:130

2A. USEPA WASTE CODE
D001

2B. STATE/LOCAL/HOST-NATION WASTE CODES

3. PROCESS GENERATING WASTE

4. PROJECTED ANNUAL VOL

5. MODE OF COLLECTION ACCUMULATION

6. IS THIS WASTE A DIOXIN LISTED WASTE AS DEFINED IN CFR 261.31? [ ] YES [X] NO

7. IS THIS WASTE RESTRICTED FROM LAND DISPOSAL? (40 CFR 268) [X] YES [ ] NO
HAS AN EXEMPTION BEEN GRANTED? [ ] YES [X] NO
DOES THE WASTE MEET APPLICABLE TREATMENT STANDARDS ALREADY? [ ] YES [X] NO
(If yes, Enter Reference Standards in Part 3, Block 6)

Part II

1. MATERIAL CHARACTERIZATION (Optional - Not Required Data)

COLOR:	DENSITY:	BTU/LB:

TOTAL SOLIDS:	ASH CONTENT:

LAYERING [ ] MULTILAYERED [ ] BILAYERED [ ] SINGLE

2. RCRA CHARACTERISTICS

PHYSICAL STATE [ ] SOLID [X] LIQUID [ ] SEMI-SOLID [ ] GAS [ ] OTHER

OTHER CHARACTERISTICS
[X] IGNITABLE [ ] CORROSIVE (D002) [ ] REACTIVE(D003) [ ] WATER REACTIVE [ ] CYANIDE REACTIVE [ ] SULFIDE REACTIVE
Flash Point: 53.6 - > 54.0 FAHRENHEIT ph: 9.1
[X] HIGH TOC (≥ 10%) [ ] LOW TOC (<10%) TREATMENT GROUP: [ ] WASTEWATER [X] NON-WASTEWATER

HAZARDOUS WASTE PROFILE SHEET (Continued)

WASTE PROFILE NO.
LA14-015LA v1

3. CHEMICAL/MATERIAL COMPOSITION List all components and contaminants, including PCB's, and any applicable F-Listed and underlying Hazardous Constituents.

CAS #	COMPONENT (Be as descriptive as possible. Chemical names, as well as generic descriptions. e.g., 'sludge', 'paint solids', 'water' etc. are acceptable)'	CONCENTRATION	RANGE		
64175	ETHANOL	<= 100 %	99.0 %	to	100.0 %
51811826	GIEMSA'S STAIN	<= 100 %	1.0 %	to	100.0 %
2353459	C.I. FOOD GREEN 3, DISODIUM SALT	< 1 %	.0 %	to	1.0 %
7778770	MONOPOTASSIUM PHOSPHATE	< 1 %	.0 %	to	1.0 %
68988921	WRIGHT-GIEMSA STAINING SOLUTION	= 25 %			25.0 %
7558794	DISODIUM PHOSPHATE	<= 100 %			100.0 %
7220793	METHYLENE BLUE TRIHYDRATE	< 1 %	.0 %	to	1.0 %
10049215	MONOSODIUM PHOSPHATE MONOHYDRATE	= .01 %			.01 %
17372871	EOSIN YELLOWISH (YS)	<= 1 %	.0 %	to	1.0 %
26628228	SODIUM AZIDE	<= .01 %	.0 %	to	.01 %
	SODIUM PHOSPHATE	< 1 %	.0 %	to	1.0 %
			RANGE TOTAL MUST EQUAL AT LEAST 100%		

3. MATERIAL COMPOSITION / UNDERLYING HAZARDOUS CONSTITUENTS

CAS #	COMPONENT (Be as descriptive as possible. Chemical names, as well as generic descriptions. e.g., 'sludge', 'paint solids', 'water' etc. are acceptable)'	CONCENTRATION	RANGE		
67561	METHANOL	> 100 %	95.0 %	to	100.0 %
			RANGE TOTAL MUST EQUAL AT LEAST 100%		

HAZARDOUS WASTE PROFILE SHEET (Continued)

WASTE PROFILE NO.
LA14-015LA v1

4. SHIPPING INFORMATION

DOT HAZARDOUS MATERIAL? [X] YES [ ] NO

PROPER SHIPPING NAME
Flammable liquid, toxic, n.o.s.

HAZARD CLASS 3	U.N. or N.A. NO. UN1992	PACKING GROUP III

ADDITIONAL DESCRIPTION
UN1992, HAZARDOUS WASTE, FLAMMABLE LIQUID, TOXIC, N.O.S., 3, PG III (METHANOL, ETHANOL, SODIUM AZIDE)

METHOD OF SHIPMENT [ ] BULK [X] DRUM [ ] OTHER

EMERGENCY RESPONSE GUIDE EDITION (YR) 2012	EMERGENCY RESPONSE NUMBER 131

5. SPECIAL HANDLING INFORMATION

6. GENERATOR CERTIFICATION
[ ] CHEMICAL ANALYSIS (ATTACH TEST RESULTS) [X] USER KNOWLEDGE (ATTACH SUPPORTING DOCUMENTS)
EXPLAIN HOW AND WHY THESE DOCUMENTS COMPLY WITH RCRA REQUIREMENTS
MSDSs, CLINS# 950200, FLAMMABLE & toxic LABELS 3 & 6.1
UN1992, HAZARDOUS WASTE, Flammable liquid, toxic, n.o.s., 3, PG III (METHANOL, ETHANOL, sodium azide)

CERTIFICATION
I, John Hamann HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS AND ALL ATTACHED DOCUMENTS IS TO THE BEST OF MY KNOWLEDGE AN ACCURATE REPRESENTATION OF THE WASTE TURNED IN TO THE DRMO. ALL KNOWN OR SUSPECTED HAZARDS HAVE BEEN DISCLOSED.

John H

Signature of Generator's Representative

12 Jan 15
Date

Fisher Scientific

Part of Thermo Fisher Scientific

Material Safety Data Sheet

Creation Date 24-Apr-2009 **Revision Date** 29-Oct-2012 **Revision Number** 2

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name **Ethanol, 200 Proof**

Cat No. : **A992-RS200**

Synonyms Absolute Ethanol; Ethyl Alcohol; Molecular Biology Grade

Recommended Use Laboratory chemicals

Company
Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Emergency Telephone Number
CHEMTREC®, Inside the USA: 800-424-9300
CHEMTREC®, Outside the USA: 001-703-527-3887

2. HAZARDS IDENTIFICATION

WARNING

Emergency Overview

Extremely flammable liquid and vapor. Vapor may cause flash fire. Aspiration hazard if swallowed - can enter lungs and cause damage. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes. Cancer hazard. This substance has caused adverse reproductive and fetal effects in humans. Hygroscopic.

Appearance Clear, Colorless **Physical State** Liquid **Odor** sweet, Characteristic

Target Organs Eyes, Central nervous system (CNS), Reproductive System, Liver, Kidney, Blood

Potential Health Effects

Acute Effects
Principle Routes of Exposure

Eyes	Irritating to eyes.
Skin	May cause irritation. Harmful in contact with skin.
Inhalation	May cause irritation of respiratory tract. Inhalation may cause central nervous system effects. Harmful by inhalation.
Ingestion	Harmful if swallowed. Aspiration hazard if swallowed - can enter lungs and cause damage. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic Effects

Cancer hazard: This substance has caused adverse reproductive and fetal effects in humans: Substances known to cause developmental toxicity in humans: Tumorigenic effects have been reported in experimental animals: May cause adverse liver effects: May cause adverse kidney effects

Aggravated Medical Conditions Central nervous system disorders. Preexisting eye disorders. Liver disorders. Skin disorders.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %
Ethyl alcohol	64-17-5	99-100

4. FIRST AID MEASURES

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur.

Ingestion Do not induce vomiting. Obtain medical attention.

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flash Point 12 °C / 53.6 °F

Method - No information available

Autoignition Temperature 363 °C / 685.4 °F

Explosion Limits
Upper 19 vol %
Lower 3.3 vol %

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Use water spray to cool unopened containers. Cool closed containers exposed to fire with water spray.

Unsuitable Extinguishing Media Water may be ineffective, Do not use a solid water stream as it may scatter and spread fire

Hazardous Combustion Products No information available.

Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical
Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Vapors may form explosive mixtures with air.

Protective Equipment and Precautions for Firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

NFPA	Health 2	Flammability 3	Instability 0	Physical hazards N/A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. Do not get in eyes, on skin, or on clothing.

Environmental Precautions Should not be released into the environment.

Methods for Containment and Clean Up Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Take precautionary measures against static discharges. Use spark-proof tools and explosion-proof equipment.

7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Ensure adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Do not breathe vapors or spray mist. Do not get in eyes, on skin, or on clothing. Do not ingest. Use spark-proof tools and explosion-proof equipment.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Flammables area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Measures Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Exposure Guidelines

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethyl alcohol	STEL: 1000 ppm	(Vacated) TWA: 1000 ppm (Vacated) TWA: 1900 mg/m³ TWA: 1000 ppm TWA: 1900 mg/m³	IDLH: 3300 ppm TWA: 1000 ppm TWA: 1900 mg/m³
Component	**Quebec**	**Mexico OEL (TWA)**	**Ontario TWAEV**
Ethyl alcohol	TWA: 1000 ppm TWA: 1880 mg/m³	TWA: 1000 ppm TWA: 1900 mg/m³	STEL: 1000 ppm

Legend

NIOSH IDLH: *The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health*

Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Liquid
Appearance	Clear, Colorless
Odor	sweet, Characteristic
Odor Threshold	No information available
pH	No information available
Vapor Pressure	No information available
Vapor Density	No information available
Viscosity	No information available
Boiling Point/Range	78 °C / 172.4 °F
Melting Point/Range	-114 °C / -173.2 °F
Decomposition Temperature	No information available
Flash Point	12 °C / 53.6 °F
Evaporation Rate	No information available
Specific Gravity	No information available
Solubility	No information available
log Pow	No data available
Molecular Weight	46.07
Molecular Formula	C2 H6 O

10. STABILITY AND REACTIVITY

Stability Hygroscopic.

Conditions to Avoid	Incompatible products. Heat, flames and sparks. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible Materials	Strong oxidizing agents, Strong acids, Acid anhydrides, Acid chlorides
Hazardous Decomposition Products	Carbon monoxide (CO), Carbon dioxide (CO_2)
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl alcohol	3450 mg/kg (Mouse)	Not listed	20000 ppm/10H (Rat)

Irritation Irritating to eyes

Toxicologically Synergistic Products No information available

Chronic Toxicity

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA	Mexico
Ethyl alcohol	A3	Group 1	Not listed	X	Not listed

ACGIH: (American Conference of Governmental Industrial Hygienists)
A1 - Known Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Animal Carcinogen
ACGIH: (American Conference of Governmental Industrial Hygienists)
OSHA: (Occupational Safety & Health Administration)
OSHA: (Occupational Safety & Health Administration)
X - Present
Mexico - Occupational Exposure Limits - Carcinogens
Mexico - Occupational Exposure Limits - Carcinogens
A1 - Confirmed Human Carcinogen
A2 - Suspected Human Carcinogen
A3 - Confirmed Animal Carcinogen
A4 - Not Classifiable as a Human Carcinogen
A5 - Not Suspected as a Human Carcinogen

Sensitization	No information available
Mutagenic Effects	Mutagenic effects have occurred in humans.
Reproductive Effects	Adverse reproductive effects have occurred in humans.
Developmental Effects	Substances known to cause developmental toxicity in humans.
Teratogenicity	Teratogenic effects have occurred in humans.
Other Adverse Effects	Tumorigenic effects have been reported in experimental animals. See actual entry in RTECS for complete information.

Endocrine Disruptor Information No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Ethyl alcohol	EC50 (72h) = 275 mg/l (Chlorella vulgaris)	Fathead minnow (Pimephales promelas) LC50 = 14200 mg/l/96h	Photobacterium phosphoreum:EC50 = 34634 mg/L/30 min Photobacterium phosphoreum:EC50 = 35470 mg/L/5 min	EC50 = 9268 mg/L/48h EC50 = 10800 mg/L/24h

Persistence and Degradability Readily biodegradable.

Bioaccumulation/ Accumulation No information available.

Mobility Will likely be mobile in the environment due to its water solubility.

Component	log Pow
Ethyl alcohol	-0.32

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

DOT

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II

TDG

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II

IATA

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II

IMDG/IMO

UN-No	UN1170
Proper Shipping Name	ETHANOL
Hazard Class	3
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

Component	TSCA	DSL	NDSL	EINECS	ELINCS	NLP	PICCS	ENCS	AICS	IECSC	KECL
Ethyl alcohol	X	X	-	200-578-6	-		X	X	X	X	X

Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313
Not applicable

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act
Not applicable

Clean Air Act
Not applicable

OSHA Occupational Safety and Health Administration
Not applicable

CERCLA
Not applicable

California Proposition 65

This product contains the following Proposition 65 chemicals: Ethyl alcohol is only a considered a Proposition 65 developmental hazard when it is ingested as an alcoholic beverage

Component	CAS-No	California Prop. 65	Prop 65 NSRL	Category
Ethyl alcohol	64-17-5	Developmental	-	Developmental Carcinogen

State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl alcohol	X	X	X	X	X

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security

This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade Serious risk, Grade 3

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class
B2 Flammable liquid
D2A Very toxic materials
D2B Toxic materials

16. OTHER INFORMATION

Prepared By Regulatory Affairs
Thermo Fisher Scientific
Email: EMSDS.RA@thermofisher.com

Creation Date 24-Apr-2009

Print Date 29-Oct-2012

Revision Summary
(M)SDS sections updated 2 3

Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS

WHMIS CLASSIFICATION CHECKLIST

Product:

CLASS A — Compressed Gas

May be located in MSDS section(s): Physical Data, Fire and Explosion Data

- ❒ Aerosol container — liquid
- ❒ Cylinder — Gas under pressure (> 40 psi)

CLASS B — Flammable/Combustible Material

May be located in MSDS section(s): Fire and Explosion Data

- ❒ Class B1 — Flammable Gases: Compressed gas that forms a flammable mixture with air at a concentration of ≤ 13% or concentration range ≥ 12%
- ❒ Class B2 — Flammable Liquids: Flashpoint of < 37.8° C (100° F)
- ❒ Class B3 — Combustible Liquids: Flashpoint of 37.8° C–93.3° C (100° F–200° F)
- ❒ Class B4 — Flammable Solids: Ignites readily, causes fires through friction/retained heat and burns with self-sustained flame
- ❒ Class B5 — Flammable Aerosols: Aerosol container that when tested gives a flame projection at full valve opening or a flashback at any degree of valve opening
- ❒ Class B6 — Reactive Flammable Materials: Spontaneously combusts under normal conditions or contact with air/water, or emits flammable gas if in contact with water

CLASS C — Oxidizing Material

May be located in MSDS section(s): Reactivity Data

- ❒ Contributes to the combustion of another material whether or not the product itself is combustible
- ❒ Organic peroxide that contains the double-bonded oxygen structure

CLASS D — Poisonous and Infectious Material

May be located in MSDS section(s): Hazardous Ingredients, Toxicological Properties

1. Class D1: Materials Causing Immediate and Serious Toxic Effects (≥ 1%)
Materials causing acute lethal effects

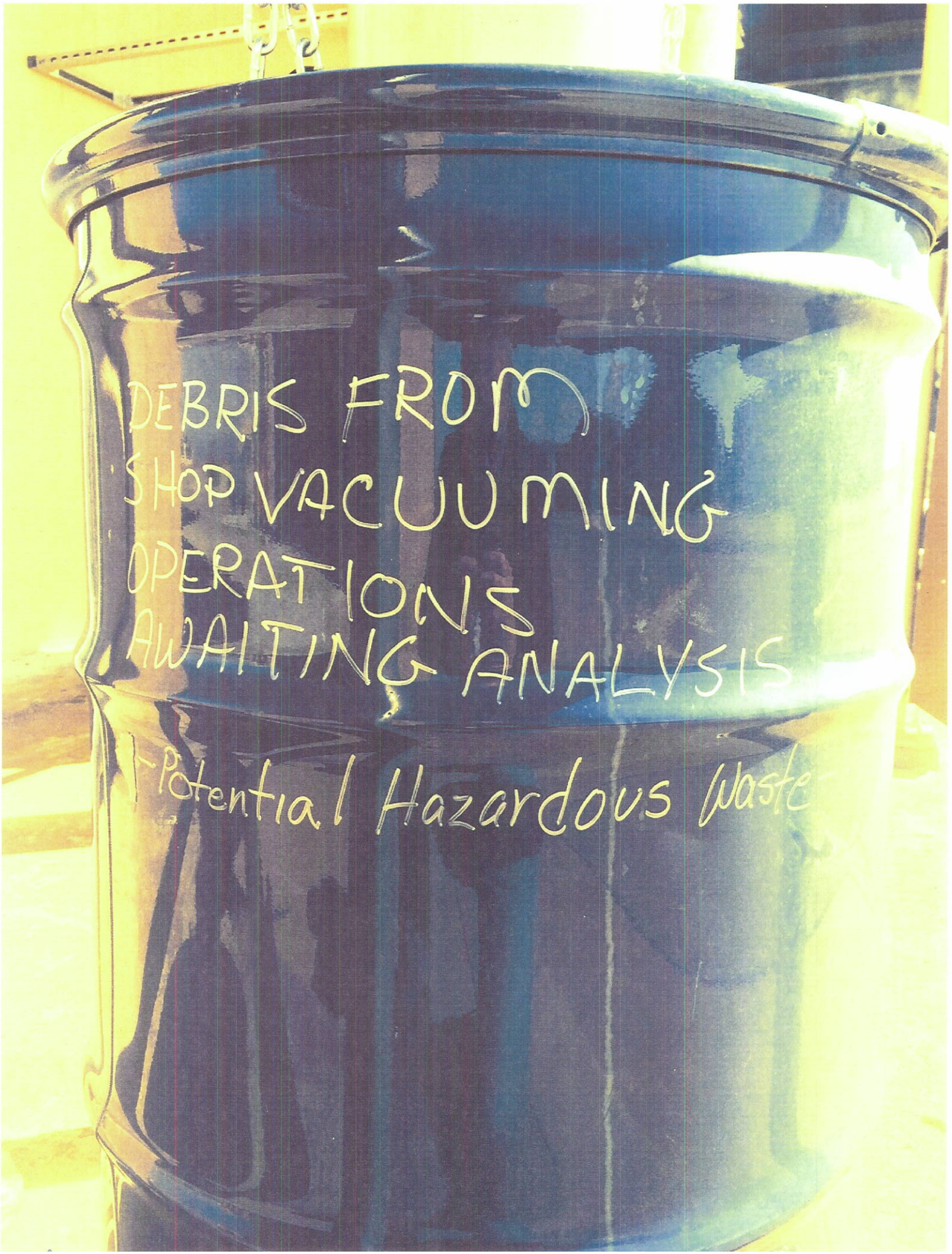
Class D1A: Very Toxic Material at ≥ 1%

- ❒ TDG Class 2.3, TDG class 6.1, Packing group I or II
- ❒ Oral Toxicity: LD_{50} ≤ 50 mg/kg
- ❒ Dermal Toxicity: LD_{50} ≤ 200 mg/kg
- ❒ Inhalation Toxicity: (4 hours)
  - Gas: LC_{50} ≤ 2500 ppm
  - Vapour: LC_{50} ≤ 1500 ppm
  - Dust, mist, fumes: LC_{50} ≤ 500 mg/m^3

Class D1B: Toxic Material at ≥ 1%

- ❒ TDG class 6.1, Packing group III
- ❒ Oral Toxicity: LD_{50} > 50 but ≤ 500 mg/kg
- ❒ Dermal Toxicity: LD_{50} > 200 but ≤ 1000 mg/kg
- ❒ Inhalation Toxicity: (4 hours)
  - Gas: No criterion
  - Vapour: LC_{50} > 1500 but ≤ 2500 ppm
  - Dust, mist, fumes: LC_{50} > 500 but ≤ 2500 mg/m^3


DEBRIS FROM
SWEEPING/VACUUMING
OPERATIONS
ANALYSIS
Hazardous waste


DEBRIS FROM
SHOP VACUUMING
OPERATIONS
AWAITING ANALYSIS
-Potential Hazardous Waste-

County High Points

Map center + : 32.837964,-106.109381 (elevation or other maps at center, directions) Distance: 0.00 miles

This certifies successful
completion of the approved 8 hour training course.

DeAnna Rothhaupt

Hazardous Waste Operations and Emergency Response Refresher

For the purposes of training required under
OSHA 29 CFR 1910.120

Conducted by

Acme Environmental, Inc.
3816 Carlisle NE
Albuquerque, NM 87107
(505) 872-ACME

course date: 08/22/12 expires on 08/22/13

course director: [signature] certificate number: 082212-06

TEXAS ENGINEERING EXTENSION SERVICE

The Texas A&M University System

TRAIN ▪ SERVE ▪ RESPOND

DeAnna M. Rothhaupt

has successfully completed

Environmental Custom Training - 32-Hour
RCRA Hazardous Waste Management & DOT hazardous Materials

32 Hours
October 8 - 11, 2012

Gary F. Sera, Director
Texas Engineering Extension Service

Jeff Bowman, Instructor
Holloman AFB, NM

Ron Peddy, Division Director
Infrastructure Training and Safety Institute

EU ENV288 0003 TEEX ID: 1172729

State Board for Educator Certification #500132

Defense Acquisition University

This certifies that

DEANNA ROTHHAUPT

has successfully completed

Facilities Engineering

FE201 Section 303

on

02/06/2015

President Defense Acquisition University

Air Force Civil Engineer Center
(AFCEC/CZTQ)

Certificate of Attendance

This certifies that

DEANNA M ROTHHAUPT

Successfully Completed

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) FULL COURSE

12-15 JANUARY 2015
DATE

Kevin G. Gabos, CIH, AFCEC/CZTQ
HM/HW/P2 Subject Matter Expert

AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

CIV DeAnna Rothhaupt

has successfully completed

HazMat Awareness Course - December 2013

conferred this **29th** *day of* **December** *in the year of* **2014**

AETC FORM 109, JUL 93 (REV)

FOR OFFICIAL USE ONLY

The United States Air Force

CERTIFIES THAT

DeAnna M Rothhaupt

HAS SUCCESSFULLY COMPLETED
THE FOLLOWING TRAINING

Training Module	Instructor	CEU/Credits	Ref#	Training Record Date
DOT Hazmat Regulations	AF ESOH Training Network		3235262	Dec-19-2014
Environmental Laws and Liability	AF ESOH Training Network		3234272	Dec-19-2014
Hazardous Properties	AF ESOH Training Network		3234817	Dec-19-2014
Hazardous Waste Compatibility	AF ESOH Training Network		3235153	Dec-19-2014
Hazardous Waste Identification	AF ESOH Training Network		3234786	Dec-19-2014
Personal Protective Equipment (PPE)	AF ESOH Training Network		3235277	Dec-19-2014
RCRA Annual Refresher Introduction	AF ESOH Training Network		3232996	Dec-18-2014
Standards Applicable to Generators	AF ESOH Training Network		3235234	Dec-19-2014

Certificate of Training

INSTRUCTOR/PROVIDER:
AF ESOH Training Network
International Center for Leadership Development

Dec-19-2014

TRAINING RECORD DATE

AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

CIV DeAnna Rothhaupt

has successfully completed

Fire Extinguisher Safety V1.0

conferred this **15th** *day of* **July** *in the year of* **2014**

AETC FORM 109, JUL 93 (REV)

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Awarded To:

Mrs. Deanna Rothhaupt

USAF SUPERVISOR'S SAFETY COURSE
(4-HRS)

09 July 2014

Daniel Salinas, DAFC, SSH
Occupational Safety/Health Technician

AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

CIV DeAnna Rothhaupt

has successfully completed

AF New Employee Orientation Course

conferred this **31st** *day of* **December** *in the year of* **2013**

AETC FORM 109, JUL 93 (REV)

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United States Air Force
Air Education and Training Command
Air University

Air Force Institute of Technology

Be it known that

Deanna M. Rothhaupt

has successfully completed

WENV 220, Unit Environmental Coordinator (UEC) Course

29 August 2013

13C-S 1.0 CEUs in compliance with IACET standards

In testimony whereof, this certificate is awarded by the Civil Engineer School.

Paul Cotellesso

PAUL COTELLESSO, Col, USAF
Dean, The Civil Engineer School

AUTHORIZED IACET PROVIDER

AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

CIV DeAnna Rothhaupt

has successfully completed

Fire Extinguisher Safety

conferred this **8th** *day of* **July** *in the year of* **2013**

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AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

CIV DeAnna Rothhaupt

has successfully completed

Environmental Management System -
General Awareness Training (ZZ133070)

conferred this **8th** *day of* **July** *in the year of* **2013**

AETC FORM 109, JUL 93 (REV)

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AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

CIV DeAnna Rothhaupt

has successfully completed

Air Force Risk Management Fundamentals Course

conferred this **1st** *day of* **July** *in the year of* **2013**

AETC FORM 109, JUL 93 (REV)

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The United States Air Force

CERTIFIES THAT

Ms. Deanna Rothhaupt

HAS SUCCESSFULLY COMPLETED THE

USAF Supervisor's Safety Course (4 Hours)

AND IS HEREWITH AWARDED THIS

Certificate of Training

LUIS E. DURAN, TSgt, USAF
Ground Safety Technician

24 April 2013
DATE

AF FORM 1256, NOV 86 Previous edition will be used.

Air University

upon recommendation of the faculty
of the
Ira C. Eaker Center for Professional Development
awards this diploma to

DeAnna Rothhaupt

for successfully completing the

Military Personnel Management Course
DCPDS CAX
4 April 2013

COLONEL, UNITED STATES AIR FORCE
VICE COMMANDER, Eaker Center

LIEUTENANT GENERAL, UNITED STATES AIR FORCE
COMMANDER, AIR UNIVERSITY

Air University

upon recommendation of the faculty
of the
Ira C. Eaker Center for Professional Development
awards this diploma to

DeAnna Rothhaupt

for successfully completing the

USAF Supervisor's Course
Course Number 0300W DCPDS CAT
26 FEBRUARY 2013

COLONEL, UNITED STATES AIR FORCE
VICE COMMANDER, Eaker Center

LIEUTENANT GENERAL, UNITED STATES AIR FORCE
COMMANDER, AIR UNIVERSITY

Air University

upon recommendation of the faculty
of the
Ira C. Eaker Center for Professional Development
awards this diploma to

DeAnna Rothhaupt

for successfully completing the

Civilian Personnel Management Course
DCPDS CAU PDS WRW
31 October 2012

COLONEL, UNITED STATES AIR FORCE
VICE COMMANDER, Eaker Center

LIEUTENANT GENERAL, UNITED STATES AIR FORCE
COMMANDER, AIR UNIVERSITY

United States Air Force
Air Education and Training Command
Air University
Air Force Institute of Technology

Be it known that

Deanna M. Rothhaupt

has successfully completed

WESS 010, Hazardous Waste Accumulation Seminar

18 January 2013

13A-W None

In testimony whereof, this certificate is awarded by the Civil Engineer School.

ROGER G. SCHULD, LT COL, USAF
Dean, The Civil Engineer School

AUTHORIZED IACET PROVIDER

WALTER D. GIVHAN, BRIGADIER GENERAL, USAF
Commandant, Air Force Institute of Technology

U.S. AIR FORCE

The United States Air Force

CERTIFIES THAT

DeAnna Rothhaupt

HAS SUCCESSFULLY COMPLETED THE

HAZARDOUS Waste Management Training Program
Holloman Air Force Base, New Mexico

AND IS HEREBY AWARDED THIS

Certificate of Training

James (DJ) Hale, Instructor
Chugach Management Services Inc.

19 Sept 2012
Date

HazMat Awareness Course - December 2013
Type: Self-paced
Format: SCORM
Cost: $0.00
Provider: AFCEC/CXF

This course is to train and certify personnel on how to recognize the presence of hazardous materials, methods to protect yourself, ways to call for trained personnel, how to secure the area, and critical information on emergency response to terrorism. This training satisfies training requirements in AFI 10-2501 Table 6.2, DoD Manual 6055.6, National Fire Protection Association Standard 472, and with the exception of meeting specific state and local requirements, complies with Federal Regulations (29 CFR 1910.120q). Students who complete this training will become DoD certified and entered into the www.dodffcert.com website database. (please follow correct procedures for establishing credit on dodffcert.com)

Directives/Justification: AFI 10-2501, DoD Manual 6055.6 and other directives mentioned above.

Prerequisites: None

Target Audience: DoD employees who must satisfy mandatory training and certification requirements required in AFI 10-2501 and DoD Manual 6055.6.

Frequency: This is a one-time training and certification requirement. However, students are required to demonstrate competency or maintain proficiency at least annually.

Completion Time: The estimated time to complete this course is 90-120 minutes.

Required Passing Score: 80%

OPR:AFCEC/CXF

Date Updated: December 2013

If you need assistance with this course, please contact the CE VLC Help Desk at DSN 523-2779 or comm. 850-283-2779 or email afcec.vlc@us.af.mil

AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

John Hamann (CIV - (GS9-12))

has successfully completed

HazMat Awareness Course - December 2013

conferred this **4th** *day of* **August** *in the year of* **2014**

AETC FORM 109, JUL 93 (REV)

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COURSE: WENV 101 Introduction to Environmental Management Course

OBJECTIVE: For each student to comprehend the responsibilities of CE environmental management, the interface with other organizations and activities, and how to plan and execute environmental programs. Students shall become familiar with management systems, requirements, and techniques to implement compliance, conservation, clean-up (restoration), and pollution prevention.

DESCRIPTION: This comprehensive course provides an overview of pertinent laws, regulations, and Air Force policies and guidance governing compliance activities (e.g., air, water, special pollutants, hazardous waste management, etc.), conservation (natural and cultural resource preservation), and clean-up (restoration). Students are introduced to Air Force established programs to comply with laws and regulations. Key programs and topics include Pollution Prevention, environmental analysis, Environmental, Safety and Occupational Health Capability Assessment and Management Program (ESOHCAMP), Installation Restoration Program (IRP), environmental funding, and contracting. In addition, the course also focuses on tasks and responsibilities that are expected of CE environmental management at the base level to include, managing effective Environmental, Safety and Occupational Health Councils (ESOHC) and partnering with regulators and the local community. Class exercises illustrate key points by allowing students to apply concepts to realistic scenarios dealing with asset management.

PRIMARY AUDIENCE: Personnel within civil engineer organizations recently assigned to environmental programs.

SECONDARY AUDIENCE: Other personnel with environmental responsibilities.

GRADE: Officers: O1-O6; Enlisted: E4-E9; Civilians: GS5-GS14

PREREQUISITES: None

DELIVERY METHOD: Resident (classroom)

COURSE CREDIT: 3 CEUs in compliance with IACET standards

COURSE LENGTH: 5 days

QUESTIONS? Send us an e-mail by clicking the **Contact Us** button.

HOW TO APPLY: Select a date from the list below by clicking the button. (Note: Some courses are offered only once annually). Then click the **Apply** button.

CURRENT OFFERINGS/METHOD:

◉ 15-Jun-2015 to 19-Jun-2015 / WPAFB Resident (Registration closes 01-Jun-2015)

Apply Back Contact Us

vma-jep-30082006

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FACULTY & STAFF DIRECTORY
COURSE CATALOG
CONSULTING
COURSE ON-SITE REQUESTS
UPCOMING EVENTS
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Last updated: 25 Feb 2015

AFIT Puts STEM Students to the Test

IACET Authorized Provider

AFIT Faculty Member Winner of the Stinson Trophy

AFIT Alum Awarded Meritorious Service Medal

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Air Force Institute of Technology
2950 Hobson Way
WPAFB, OH 45433-7765
TEL: 937-255-6565

United States Air Force
Air Education and Training Command
Air University

Air Force Institute of Technology

Be it known that

John Hamann

has successfully completed

Introduction to Environmental Management

WENV 101 14A 3 CEUs 27-31 Jan 2014

In testimony whereof, this certificate is awarded by the Civil Engineer School.

Paul Cotellesso

PAUL COTELLESSO, Col, USAF
Dean, The Civil Engineer School

AUTHORIZED IACET PROVIDER

Hazardous Waste Management - Initial Accumulation Point (IAP) Manager (Level 2)

Font - Font +

Description:
This training is designed for Hazardous Waste Initial Accumulation Point managers. Topics include proper identification, collection, and management of hw generated at shop; pertinent regulatory acts; the definition of waste, hazardous materials and hazardous waste including used oil and universal waste; identifying a potential regulated waste; how to manage Initial Accumulation Points, including container management, area management practices, disposal, on-site transportation, emergency procedures and prevention, personal safety and training requirements, and waste minimization; and initial (satellite) accumulation point recordkeeping requirements.

Justification/Objective: AFI 32-7042, Waste Management.

Target Audience: Any individual responsible for the management of a shop-level Hazardous Waste Initial Accumulation Point, to include Active Duty, ANG, AFRES, civilian employee or contractor personnel.

Frequency: Training is required annually.

Approximate Completion Time: 1 hour

Post-Test Required Score: N/A

OPR: AFIT/CEV

Date Updated: June 2011

Select the "Take/Resume Course" button if you are taking this course for CREDIT, using the "Browse/Review" button (if displayed) will cause the system to cease tracking your activity within the course, and should be used ONLY if no credit is required/desired. Click on the "Return to Course List" to go back to the online course list.

NOTICE - If you have a pop-up blocker on, the course won't launch. Please allow pop-ups from this site to take your course.

Take/Resume Course

Return to Course List

AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

John Hamann (CIV - (GS9-12))

has successfully completed

Hazardous Waste Management - Initial Accumulation Point (IAP) Manager (Level 2)

conferred this 26th *day of* June *in the year of* 2014

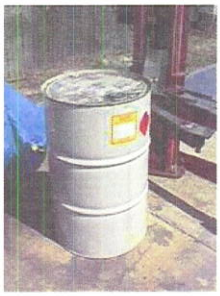
You are logged in as:
Hamann, John

Your current location is:
Holloman AFB

Your last login was:
16-December-2014 13:46

Hazardous Waste Initial Accumulation Point Manager: New Mexico

General Hazardous Waste Requirements



Hazardous waste regulations require the generator to determine if your waste is hazardous. You must also determine how much hazardous waste you generate and how often you generate hazardous waste. Records are essential to document that you are properly managing and handling your hazardous waste from the time you generate it until you receive confirmation of proper hazardous waste disposal.

Hazardous waste must not be disposed of in the following ways:

- on or in the ground
- in local landfills
- in septic tanks or injection wells
- down the sink or drains

Regardless of quantity, the generator of hazardous waste is ultimately responsible for the waste from **cradle to grave**, and can be held liable for improper management of hazardous waste even though it may have been sent to a permitted hazardous waste treatment, storage, or disposal facility using a licensed transporter.

HAZARDOUS WASTE MAY NEVER BE DISPOSED OF IN SEPTIC TANKS OR ON THE GROUND AT FACILITIES THAT DO NOT HAVE HAZARDOUS WASTE PERMITS.

HAZARDOUS WASTE MAY ONLY BE BURNED IN PERMITTED HAZARDOUS WASTE INCINERATORS. DO NOT DISPOSE OF HAZARDOUS WASTE BY EVAPORATION.

Next Page

The United States Air Force

CERTIFIES THAT

John Hamann

HAS SUCCESSFULLY COMPLETED
THE FOLLOWING TRAINING

Training Module	Instructor	CEU/Credits	Ref#	Training Record Date
Hazardous Waste Initial Accumulation Point Manager: New Mexico	AF ESOH Training Network		2209695	Apr-07-2014
RCRA Annual Refresher Introduction	AF ESOH Training Network		1886929	Sep-04-2013

Certificate of Training

INSTRUCTOR/PROVIDER:
AF ESOH Training Network
International Center for Leadership Development

Apr-07-2014

TRAINING RECORD DATE

AIR EDUCATION AND TRAINING COMMAND

UNITED STATES AIR FORCE

This is to certify that

CIV John Hamann

has successfully completed

Fire Extinguisher Safety V1.0

conferred this **24th** *day of* **July** *in the year of* **2014**

AETC FORM 109, JUL 93 (REV)

FOR OFFICIAL USE ONLY

CHENEGA®
GLOBAL SERVICES, LLC

23 July 2014

CENTRAL ACCUMULATION POINT (CAP) ASSIGNMENT & TRAINING PLAN

SUBJECT: Assignment of Chenega Global Services LLC staff to Holloman AFB Central Accumulation Point (CAP).

In accordance with 40 CFR 265.16(d)(1), a list of job titles for each position at the facility related to hazardous waste management, and the name of the employee filling each job. The following CGS employees are assigned the following positions:

NAME	TITLE	POSITION
James (DJ) Hale	Site Manager/Lead ET	Primary CAP Manager
Peter Nissley	Environmental Technician	Alternate CAP Manager

TRAINING REQUIREMENTS:
In accordance with 40 CFR 265.16(d)(3), the following identifies introductory and continuing training requirements. This training include all required elements outlined in 40 CFR 265.16(a).

MINIMUM INTRODUCTORY TRAINING

- 40 – hour HAZWOPER
- Holloman AFB Hazardous Waste Manager Training
- D.O.T. Training - *Refresher every 3rd year*
- Chenega Hazard Communication & MSDS Training
- Air Force Environmental Management System (EMS) Training (Online - ESOHTN)
- Holloman AFB Contingency Plan (Spill Response, Emergency Procedures, Equipment and Systems)
- Holloman AFB HWMP (Review)

NOTE: IAW 40 CFR 265.16(b) Facility personnel must complete introductory training requirements within six months after date of their employment or assignment to related position.

MINIMUM ANNUAL CONTINUING TRAINING

- 8 – hour HAZWOPER Refresher
- Holloman AFB Hazardous Waste Manager Training (Refresher – Online ESOHTN) Start date May 2013, per HWMP
- D.O.T. Training - *Refresher every 3rd year*
- Chenega Hazard Communication & MSDS Training
- Air Force Environmental Management System (EMS) Training (Online - ESOHTN)
- Holloman AFB Contingency Plan (Spill Response, Emergency Procedures, Equipment and Systems)
- Holloman AFB HWMP (Review)

NOTE: IAW 40 CFR 265.16 (e) Training records on current personnel must be kept until closure of the facility. Training records on former employees must be kept for at least three years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

Respectfully,

James (DJ) Hale
Chenega Global Services, LLC
Site Manager