Ashland

Ashland Chemical Company
DIVISION OF ASHLAND OIL, INC.

6428 JOLIET ROAD, COUNTRYSIDE, ILLINOIS 60525 • (312) 579-2880

May 14, 1987

ARROW GEAR COMPANY
2301 Curtiss Street
Downers Grove, IL 60515
Attn: Stan Cherney

Dear Stan:

As you requested, I am enclosing Chemical Waste Managerment's analysis of your spent coper strip solution.

I hope this meets with your satisfaction. If you have any questions, please give me a call or leave a message at 312-579-2868.

Thanks for everything.

Sincerely,

Kirk

Kirk Steutermann
Sales Representative

Copy To A. Greco
5/18/87
HO

KS/bb

Ashland's Commitment
to Quality and Productivity

SPECIAL WASTE ANALYSIS REPORT

This Report is intended for the sole use and benefit of Waste Management and its companies. No representation concerning significance of the reported data is made to any other person or entity.

WASTE PROFILE SHEET CODE

FROM SAMPLE CONTAINER

LABORATORY NAME Chem Tech Center

ADDRESS

DATE SAMPLE RECEIVED AT LAB

LAB SAMPLE NUMBER ASSIGNED

97000946 PROF: ASH210234 02/12/87
ARROW GEAR
DOWNERS GROVE, IL
SRCE: ASH SITE: ALA LCH RECERT
SPENT COPPER STRIP SOLUTION

CERTIFICATION Except as explicitly noted, all analytical data reported below were obtained under my direction and supervision using sample preparation and analytical methods and analytical equipment specified or approved in the most recent "Test Methods for the Evaluation of Solid Waste Physical/Chemical Methods", SW 846 USEPA Office of Solid Waste. This laboratory follows a quality assurance control program including a sample chain of custody procedure.

DATE OF REPORT 3/3/87

SIGNATURE Ray Antkowiak

LAB MANAGER NAME Dr. E. Scott Tucker

PHYSICAL CHARACTERISTICS OF WASTE INCIDENTAL

SAMPLE VOLUME	COLOR	ODOR	PHYSICAL STATE @ 70°F	LAYERS	FREE LIQUIDS
1 qt	Dark Blue	☒ NONE ☐ MILD ☐ STRONG DESCRIBE	☐ SOLID ☐ SEMI-SOLID ☒ LIQUID ☐ POWDER	☐ MULTILAYERED ☐ BI-LAYERED ☒ SINGLE PHASED	☒ YES ☐ NO VOLUME 100

Test	As Received	Extraction Procedure	Date of Analysis	Test	As Received	Extraction Procedure	Date of Analysis
Specific Gravity				Sulfide Screen mg/l	<2		
pH	9.0			Phenol Screen mg/l			
Acidity % as				Cyanide Screen mg/l	<10		
Alkalinity % as				Phenols, mg/l			
C O D mg/l				Cyanides, as CN Total mg/l			
B O.D mg/l				Cyanides, as CN Free mg/l			
Total Residue @ 105°C	12.3%						
Total Dissolved Solids mg/l				Nitrogen Ammonia, as N mg/l			
Residue on Evaporation @ 180°C				Total Kjeldahl Nitrogen as N mg/l			
Water as H2O%							
Flash Point F°	>212°			Total Alkalinity, P as $CaCO_3$ mg/l			
Ash Content on ignition (%)	9.4%			Total Alkalinity M as $CaCO_3$ mg/l			
Heating Value, BTU/lb				Total Hardness as $CaCO_3$ mg/l			
Acid Scrub gNaOH/g				Calcium Hardness, as CaCO mg/l			
				Magnesium Hardness, as $CaCO_3$ mg/l			
Arsenic, as As, mg/l							
Barium, as Ba, mg/l							
Bromium as Br, mg/l				Oil and Grease, mg/l			
Cadmium as Cd, mg/l							
Chromium Total as Cr, mg/l							
Hexavalent Chromium as Cr, mg/l				Aldrin mg/l			
Copper, as Cu mg/l	74000.			Chlordane, mg/L			
Iron, Total as Fe, mg/l				DDT, mg/l			
Iron, dissolved, as Fe, mg/l				Dieldrin, mg/l			
Lead, as Pb, mg/l				Endrin, mg/l			
Manganese, as Mn, mg/l				Heptachlor mg/l			
Magnesium as Mg, mg/l				Lindane, mg/l			
Mercury as Hg, mg/l				Methoxychlor, mg/l			
Nickel, as Ni, mg/l				Toxaphene mg/l			
Selenium, as Se mg/l				Parathion mg/l			
Silver as Ag, mg/l				2,4, D, mg/l			
Zinc, as Zn, mg/l				2, 4, 5 TP (Silvex), mg/l			
Sodium, as Na, mg/l				PCB's mg/l			
Potassium, as K, mg/l							
Total Bromide, mg/l				Water mix - soluble			
Total Sulfur, mg/l							
Chlorides, as Cl mg/l							
Fluorides, mg/l							
Nitrates, as NO_3 mg/l							
Nitrite, as NO, mg/l							
Phosphate as P, mg/l							
Sulfate as SO_4, mg/l							
Sulfides as S, mg/l Dissolved				Radiation < Background			