6/8/87

4816 PROFILE: CWI030903 05/13/83
HYSAN CORP
BLUE ISLAND, IL
SOURCE: SAL SITE: CID
GENERAL EFFLUENT

IAL WASTE ANALYSIS REPORT

ATORY: Chemical Waste Management Technical Center

FILE SHEET RECEIVED ON: 5/05/83 REPRESENTATIVE SAMPLE RECEIVED ON: _____

ERTIFICATE OF REP. SAMPLE RECEIVED: 5/05/83 SAMPLE TAKEN: 5/04/83

PROPOSED TREATMENT/DISPOSAL FACILITY: CID#2 / LAKE

THE ANALYSES BELOW REPORTED WERE SELECTED BY ME, BASED UPON THE GENERATOR'S REPRESENTATIONS IN THE PROFILE SHEET AND ANY APPLICABLE WASTE ANALYSIS PLAN ESTABLISHED BY THE PROPOSED FACILITY FOR WASTE OF THIS TYPE. ANALYSES REQUIRED BY A WASTE ANALYSIS PLAN ARE INDICATED BY AN ASTERISK (*).

US EPA RECORDS CENTER REGION 5
463967

DATE OF ANALYSIS: 6-7-83 LAB MANAGER: Kirk A Stemple

Test	As Received	Leachate	Analyst Initials	Test	As Received	EPT Leachate	Analyst Initials
Specific Gravity							
pH	6.8						
Acidity, % as							
Alkalinity, % as				Phenols, mg/l	<10.0		
C O D, mg/l				Cyanides, as CN, Total, mg/l	<10.0		
B O D_5, mg/l				Cyanides, as CN, Free, mg/l			
Total Solids @ 105°C	<0.01%						
Total Dissolved Solids, mg/l				Nitrogen, Ammonia, as N, mg/l			
Total Suspended Solids, mg/l				Nitrogen, Organic, as N, mg/l			
Residue on Evaporation @ 180°C				Total Kjeldahl Nitrogen, as N, mg/l			
Flash Point, F°	>212			Total Alkalinity (P), as $CaCO_3$, mg/l			
Ash Content, on ignition	<0.01%			Total Alkalinity (M), as $CaCO_3$, mg/l			
Heating Valve, BTU/lb				Total Hardness, as $CaCO_3$, mg/l			
"Acid Scrub," gNaOH/g				Calcium Hardness, as $CaCO_3$, mg/l			
				Magnesium Hardness, as $CaCO_3$, mg/l			
Arsenic, as AS, mg/l	<0.01						
Barium, as Ba, mg/l	0.11						
Boron, as Bi, mg/l				Oil and Grease, mg/l	2374		
Cadmium, as Cd, mg/l	0.04						
Chromium, Total as Cr, mg/l	<0.05						
Hexavalent Chromium @ Cr, mg/l				Aldrin, mg/l			
Copper, as Cu, mg/l	0.21			Chlordane, mg/l			
Iron, Total as Fe, mg/l	4.65			DDT's, mg/l			
Iron, dissolved, as Fe, mg/l				Dieldrin, mg/l			
Lead, as Pb, mg/l	0.94			Endrin, mg/l		<0.02	
Manganese, as Mn, mg/l				Heptachlor, mg/l			
Magnesium, as Mg, mg/l				Lindane, mg/l		<0.40	
Mercury, as Hg, mg/l	<0.005			Methoxychlor, mg/l		<10.0	
Nickel, as Ni, mg/l	0.16			Toxaphene, mg/l		<0.5	
Selenium, as Se, mg/l	<0.01			Parathion, mg/l			
Silver, as Ag, mg/l	0.15			2, 4, D, mg/l		<10.0	
Zinc, as Zn, mg/l	0.44			2, 4, 5, TP (Silvex), mg/l		<1.0	
				PCB's, mg/l			
Bicarbonates, as HCO_3, mg/l				Solvents	<1%		
Carbonates, as CO_3, mg/l							
Chlorides, as Cl, mg/l							
Fluorides, as F, mg/l	1.5						
Nitrate, as NO_3, mg/l	5.7						
Nitrite, as NO_2, mg/l							
Phosphate, as P, mg/l							
Sulfate, as SO_4, mg/l							
Sulfides, as S, mg/l Dissolved	<2.0						

FORM WMI-52 (Rev. 11-5-80)
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6/8/87

20 OZ. AEROSOLS

570-04	**C.I.K. 20** Roach, Ant, Crawling Insect Killer
807-02	**CLEAR THRU** Glass Cleaner
275-04	**DRI-KIL** Dry Spray Insecticide
370-03	**DRISCENT** Dry Spray Air Freshener
195-04	**F.I.K. 20** Fog Blaster Insecticide
661-02	**GONE 20** Heavy Duty Emulsion Cleaner
416-02	**GO-SPOT** Spot Remover for Carpets & Rugs
521-02	**HP-521** Glass Cleaner (Economy Grade)
777-02	**HY-ACTION** Self Cleaning Oven Cleaner (No Screening Avail.)
844-08	**HYNOTE** Lemon Odor Furniture Polish
859-02	**HYSHINE** Water Base Stainless Steel Maintainer
876-02	**LEMON HYSHINE** Water Base Stainless Steel Maintainer
211-05	**HYSTRIP** Baseboard Cleaner
194-06	**LEMON 20** Disinfectant Deodorant
900-08	**LEMON-N-WAX** Polish
690-02	**LIVE 20** Battery Saver
576-06	**MEDICIDE TB** Disinfectant & Room Deodorant
835-08	**MIM 20** Silicone Spray
187-06	**MINT 20** Disinfectant Deodorant
942-02	**NAB 20** Nut/Bolt Loosener/Penetrant
875-02	**OVATION** Lemon Oven Cleaner (No Screening Available)
718-02	**PAL** Moisture & Corrosion Preventer
803-06	**PIK UP 20** Dust Mop Treatment
151-07	**POWERFOAM** Enzyme Drainline Injection System
203-04	**PLOK** Insecticide
204-04	**CHERRY PLOK** Insecticide
240-04	**PS 75** Insecticide
700-02	**SAC 20** Solvent Degreaser & Spot Cleaner
675-02	**SLEEK** Germicidal Utility Cleaner
592-06	**SO-CLENE 20** Chalkboard Cleaner
373-03	**SPRING FRESH** Dry Spray Air Freshener
799-02	**STA BRITE** Stainless Steel Cleaner & Polish
579-04	**TRAPPER** Residual Insecticide
845-08	**TRIUMPH** Furniture Polish, Dust & Wax Type
822-02	**VANDALEX 20** Mark Remover (No Screening Available)

(aerosols continued on next page)

6/5/87

AEROSOLS
24 OZ. AEROSOLS

673-02	**AERO BOL**	Non Acid Bowl Cleaner
672-02	**BAFIX**	Germicidal Utility Cleaner
570-04	**C.I.K. 24**	Roach, Ant, & Crawling Insect Killer
542-06	**CONCEPT TB**	Disinfectant-Deodorant
718-02	**4EEE'S**	Moisture & Corrosion Preventer
661-02	**GONE 24**	Heavy Duty Emulsion Cleaner
840-02	**HY-CLEAR**	Glass Cleaner
835-08	**HYSIL**	Silicone Spray
700-02	**HYSOLV**	Solvent Degreaser & Spot Cleaner
486-02	**HYSOLUTE #1**	Oil Spot Cleaner for Carpets & Rugs
484-02	**HYSOLUTE #2**	Water Spot Cleaner for Carpets & Rugs
167-06	**LEMON 24**	Disinfectant Deodorant
690-02	**LIVE 24**	Battery Saver
942-02	**NAB 24**	Nut-Bolt Loosener/Penetrant
803-06	**PIK-UP 24**	Dust Cloth/Mop Treatment
172-02	**SHAMPRO**	Soil Retarding Rug Shampoo
592-06	**SO-CLENE 24**	Chalkboard Cleaner
141-02	**TOUT**	Tile & Grout Cleaner
822-02	**VANDALEX 24**	Mark Remover (No Screening Available)

16 OZ. AEROSOLS

821-02	**C-CLEAR**	Glass Cleaner
135-02	**CHEETAH**	Cold Start Spray for Gas or Diesel Engines
255-04	**HYBLAST**	Wasp, Hornet, & Yellow Jacket Killer
828-08	**HYCHROME**	Polish & Cleaner
905-02	**HYMELT 16**	De-Icer for Windshields
842-02	**M-60**	Glass Cleaner (Economy Formula)
835-08	**MIM 16**	Silicone Spray
189-02	**N. R. ELECTRONIC**	Solvent Degreaser - X
942-02	**NAB 16**	Nut/Bolt Loosener/Penetrant
718-02	**PAL 16**	Moisture & Corrosion Preventer
700-02	**SAC 16**	Solvent Degreaser & Spot Cleaner
396-09	**SUPER SMOOTH**	Waterless Hand Cleaner

Private Label minimum is 12 dozen for any one aerosol. *FREIGHT IS ALLOWED up to a maximum of $3.50 CWT on 24
provided the order includes 12 dozen of one item. X = Our aerosols do not contain fluorocarbons with the exceptio

NOTE; All above pricing is per dozen. Pricing also available on higher quantities than those listed above

ALL OUR PRODUCTS ARE PACKAGED IN NEW CONTAINERS. WHEN ORDERING, PLEASE SPECIFY PRODUCT NUMBER A

Product Number	Product Description
R0003	PRFM WL-5860
R0013	PRFM AMYL ACET
R0026	PRFM LMN 294
R0033	PRFM ISOPROPYL MYRISTATE
R0034	PRFM MASK D279
R0037	PRFM EXE 337
R0038	PRFM HONSUCKLE
R0045	PRFM METHSAL
R0083	PRFM #31-761
R0201	AMMONIA AQUA
R0218	WITCONOL 14-F
R0229	CARNAUBAWAX #1
R0232	CARDIS 36 WAX
R0245	SMA 2625-A
R0274	TITANIUM DIOXI
R0276	CAB O SIL M5
R0281	APCO 360
R0284	MASIL 100 CTKS
R0290	DOWANOL EPH
R0296	VEEGUM T
R0313	BUTYL CELLOSOL
R0319	EDTA TETRA SOD
R0323	AEROTHENE MM
R0337	FORMALIN
R0341	GLYCERINE
R0344	HEXYLENE GLYCO
R0346	IGEPAL CA 720
R0347	ISOPROPANOL 99
R0353	WITCOLATE WAC
R0355	METHYL PARASEP
R0356	MINERAL SEAL
R0367	PARAFFIN OIL
R0379	PREVENTOL BP ISOPRONAL
R0384	SNOW FLOSS
R0400	ALCOHOL SDA40
R0403	BARQUAT 4250
R0405	BENZOCAINE
R0422	LINSEED OIL
R0427	IRGASAN DP 300
R0443	PETRO BAF
R0451	SUPER N
R0457	TRISOD PHOSPHT
R0471	ISO PALMITATE
R0506	OB #140 SOLV
R0532	BAYGON TECH95%
R0547	ETHYLAN
R0569	SOD BENZOATE
R0582	AMERCHOL L-101
R0642	CMHEC TYPE 37L
R0660	TERPINOL 350
R0677	ZONYL FSK
R0682	CARB SOLVENT
R0695	T-5 CONC
R0698	VANDALEX BLEND

Product Number	Product Description
R0704	DERIPHAT 154
R0730	TETRAPOT PYRO
R0740	TEA 99% USP
R0751	CMC 7-L-2
R0756	NINOL AA-62
R0765	STARCH #839
R0766	SM-2061 EMUL
R0767	FC 905
R0776	SBP 1382 CHLORP
R0779	ALUM CHLRHYDRT
R0788	DIAZOL 87
R0789	RITADERM
R0790	NEO FAT 18-55
R0791	NEO FAT #255
R0798	NEODAL 25-12
R0799	NINOL 96-SL
R0804	BHT CA01
R0806	ROTENONE
R0808	AEROTHENE TT
R0810	DI ISO BUTYL
R0811	DOWICIDE #1
R0812	WITCONOL 14
R0814	ETHOMEEN S 12
R0817	BARQUAT MS-100
R0818	TERGITOL 15S3
R0819	ISOPAR M
R0822	METHANOL
R0825	MINERAL SPTS Napthalene
R0827	PENTAPHEN 67
R0828	PERCHLORO ETHY
R0829	ARCOPRIME 350
R0831	PVP K30
R0832	PROPYLENE GLYC
R0835	MGK 933
R0837	ASPHALT 1611
R0841	SBP-1382-12%
R0849	MASIL 350 CTKS
R0853	SILICONE LE462
R0854	MASIL 60000CS
R0857	TRIETHL PHOS
R0882	ALOX 2028
R0893	KLEAROL N.F.
R0896	EPOXAL 9-5
R0897	WHITE OIL 85-T
R0903	ALOX 1680
R0909	ARMOX EWS
R0912	WOOD ROSIN WW
R0916	MGK 2086
R0917	MGK-51
R0920	MGK 6440
R0936	TALC 1625
R0938	ZINC PHENOL
R0942	ZELEC
R0952	DDVP TECH

Product Number	Product Description
R0961	PYROCIDE 57
R0962	D TRANS 1860
R0963	MULTICIDE 2155
R0964	D TRANS 1957
R0967	FREON TF SOLN
R0968	TWEEN 80
R0969	S-MAZ-80
R0975	IGEPAL CO630
R0985	AMERZYME-A-100
R0986	PYROCIDE #6788
R1005	MGK 5444
R1008	PREWASH SPOTTE
R1014	MGK 7004
R1022	GREASE 67-1
R1032	ISOPAR E
R1033	MASIL 1,000 CT
R1038	SBP1382-10-7.5
R1047	GLYCOL ETHER DPM
R1048	SBP-1382 CONC.40-F1
R1052	MAPROSYL-30
R1053	SM-2162 SIL
R1061	AMP-REGULAR
R1069	LOPS/150
R1075	PYRENONE 50-5-WB
R1076	#5516 GREASE
R1078	500 SECOND OIL
R1079	CALCIUM PETRONATE 25C
R1081	CLINTWOOD LT 14-69
R1088	EMTHOX 5964
R1202	PRFM Y-12
R1229	PRFM #215LEMON
R1237	PRFM LMNGR 150
R1255	PRFM LEMON 340
R1256	PRFM SPEAR SYN
R1261	PRFM LMN 11454
R1272	PRFM LAV SPICE
R1295	PRFM LEMONLIME
R1400	PRFM #180 IFF
R1404	PRFM M713 BABY
R1412	PRFM MENTHOL
R1413	PRFM OM-0076B
R1414	PRFM #778 FLOR
R1423	PRFM GRN-Q-354
R1424	PRFM W-1364
R1426	PRFM Q3048 RAIN
R1429	PRFM P-3235 SPICE AIR FRESH
R1430	PRFM Q3053 SPRNG FLWRS

3 semi-vol PAHs

TOTAL NUMBER OF RECORDS PROCESSED 155

(65600—60M—10-57)

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Cinders		0	2
Clay and gravel		2	15
Clay and broken lime		15	20
Gray mud		20	35
Gray drift and brown lime		35	45
Gray limestone		45	315
Brown limestone		315	400
Dark gray shale		400	405
Hard gray limestone		405	440
Gray shale		440	555
Brown limestone		555	889
Medium sandstone, white		889	950
Hard, sandstone, white		950	995
Medium sandstone, white		995	1035
Hard sandstone, white		1035	1060
Medium sandstone, white		1060	1145
Hard sandstone, white		1145	1183
Hard limestone		1183	1209
Hard gray shale		1209	1215
Hard limestone		1215	1295
Medium pink limestone, trace of shale		1295	1300
Sandy limestone, shale streaks		1300	1310
Gray limestone		1310	1340
Sandy limestone		1340	1410
Limestone		1410	1435
White sandstone		1435	1445
Sandy limestone		1445	1465
White sandstone with limestone streaks		1465	1490
Hard white sandstone		1490	1520
Medium white sandstone with streaks of green shale		1520	1525
Hard white sandstone		1525	1535

COMPANY Layne-Western Company
FARM Libby McNeill & Libby NO. 1
DATE DRILLED August 1961 COUNTY NO. 419
AUTHORITY Layne-Western Company
ELEVATION 595 ETM 7½
LOCATION Ap. 600'E line, 800'N line of the section
COUNTY COOK 1-36N-13E

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

Completed 5-10-68

10. Dept. Mines and Minerals permit No. 4469 Year 1968
11. Property owner U.S. RAILWAY Well No.
Address 135TH + CALIFORNIA BLUE ISL
Driller R. FOYLE License No. 92-166
12. Water from _____ Formation
at depth ____ to ____ ft.
14. Screen: Diam. ____ in.
Length: ____ ft. Slot ____
13. County COOK
Sec. 1
Twp. 36N
Rng. 13E
Elev. ____

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	SEAMLESS	0'	40'

SHOW LOCATION IN SECTION PLAT
475'N line
425' E lin
NW (Permi

16. Size Hole below casing: 6 in.
17. Static level 5 ft. below casing top which is 1 ft above ground level. Pumping level 60 ft. when pumping at 50 gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
BLACK DIRT	4'	4'
PEAT	10'	14'
BLUE CLAY	15'	29
GRAVEL	11'	40'
ROCK	115'	155
Tracing done by Dept. of Pub. Health		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Richard Foyle DATE 5-18-68

COUNTY No. 652 S.S. # 55335

COOK 1-36N-13E

Strata	Thickness	Top	Bottom
Surface		0	5
Drift, gravel & blue shale		5	20
Broken lime		20	40
Hard gray lime		40	50
Broken lime		50	55
Lime & green shale		55	60
Gray lime		60	250
Blue gray lime		250	295
No record		295	305
Brown lime		305	350
Lime & shale		350	355
Lime, brown hard		355	365
Gray lime, hard		365	390
Lime, broken & shale		390	395
Lime, shale & some sand		395	400
Grey sandy lime, hard		400	405
Gray lime, hard, & shale		405	410
Brown lime		410	415
Gray lime		415	425
Broken sandy lime		425	430
Broken lime & shale		430	435
Shale		435	540
Shale & dolomite lime		540	550
Dolomite lime		550	555
Brown lime, hard		555	560
Gray lime		560	580
Hard brown lime		580	630
Lime, brown, hard		630	800
Lime, dark gray, hard		800	825
Lime, gray & brown, hard		825	870
Lime, brown & gray		870	875

COMPANY Clarence Hughes
FARM Miller Potato Co. NO.
DATE DRILLED 1958 COUNTY NO. 138
AUTHORITY Clarence Hughes
ELEVATION
LOCATION 1000'E line, 1840'S line, SE
COUNTY COOK

1-36N-13E

Strata	Thickness	Top	Bottom
Medium white sandstone		1585	154
Soft white sandstone		1545	157
Hard limestone		1575	158
Hard whitesandstone		1580	158
Light brown medium sandstone		1585	159
Hard sand and limestone		1595	160
Light brown limestone		1600	160
Gray limestone		1605	161
			T

Casing: 56' - 20" - 3/8" Steel with welded joints from +3 to -53
565' - 16" - 3/8" Steel with welded joints from +2 to -563

Size of Hole: 20" from 0' to 53'
19½" from 53' to 563'
15¾" from 563' to 1618'

Cementing Record: 16" casing cemented bottom to top

Static Level: 420'
Pumping Level: 597' after 24 hours pumping at 1020 gallons per minute
Length of Test: 24 hours

Well shot as follows with 100% gelatin: 100 # at 1595'; 50# at 1570'; 50# at 1550'; 100# at 1525'; 100# at 1500'; 100# at 1475'

S. S. # 41228

COUNTY Layne-Western Company #1 Libby McNeill & Lib
COOK 1-36N-13E

ILLINOIS GEOLOGICAL SURVEY, URBANA

Strata	Thickness	Top	Bottom
Tops from Sample Set # 30712			
Pleistocene series	20	0	20
Silurian system (possibly Devonian at top)	370	20	390
Maquoketa formation	150	390	540
Galena-Platteville formation	334	540	874
Glenwood-St. Peter formation	454	874	1328
Franconia formation	107	1328	1435
Ironton-Galesville formation	180	1435	1615
Eau Claire formation	36	1615	[illegible]
Total Depth			1651

COMPANY Clarence Hughes
FARM Miller Potato Co. NO.
DATE DRILLED 1958 COUNTY NO. 138
AUTHORITY G. H. Emrich
ELEVATION 600' E.T.M.
LOCATION 1000'E line, 1840' S line, SE
COUNTY COOK

1-36N-13E

Strata	Thickness	Top	Bottom
St. Peter Sandstone		875	126[illegible]
Shale		1265	127[illegible]
Lime & shale		1270	128[illegible]
Red rock		1280	130[illegible]
Red rock & shale		1305	131[illegible]
Gray shale		1315	135[illegible]
Shale & lime		1350	136[illegible]
Sandstone & lime, hard		1365	137[illegible]
Gray shale & lime		1370	139[illegible]
Gray lime		1395	141[illegible]
Gray sandy lime		1410	147[illegible]
Galesville sandstone		1470	161[illegible]
Sand & shale		1615	162[illegible]
Lime, dark gray, hard		1620	164[illegible]
Gray lime & shale		1640	165[illegible]
			TD

Size of well: 15¼", surface to 15'; 13¼" to 578'; 10" to 1370'; 8" to 1651'.

Casing: 14" from 0 to 65'10"
10" from 0 to 578'.

S.S.# 30712

COUNTY COOK

Clarence Hughes
Miller Potato Co.
1-36N-13E

Town Blue Island Township Bremen Map No. 25
Company Ed Perry No. R. 13E
Farm Britt, Adelbert & Gertrude. John T. Sec.
Authority Ed Perry, Midlothian, Ill. 36 1
Elevation 597 top. map N
Collector
Confidential Date Drilled 1941
SE NE NW NW

No.	Strata	Thickness Feet	Thickness In.	Depth Feet	Depth In.
	Lot 12, 20' W., 20' N. of 136th St. and Sacramento Ave.				
	Sand	24		24	
	Clay, blue	6		30	
	Hardpan	1	6	31	6
	Shale, blue	1	6	33	
	Bed rock	60		93	

NO ENVELOPE

~~ORIGINAL~~

COUNTY Cook INDEX NO. 2501
DRILL RECORD 1-36N-13E

Town bbins Township Bremen Map 25
Company Ed Perry No. R. 13E
Farm Burris, David D. No. T.
Authority Ed. Perry, Midlothian 36
Elevation 598 top. map N
Collector
Confidential Date Drilled 1940
SW NW NW NW

No.	Strata	Thickness Feet	Thickness In.	Depth Feet
	13535 Clare Blvd.			
	Soil, black	1		1
	Sand	5		6
	Limestone, white	39		45
	Gray and dark brown, extremely hard ("2 days drilling that 5")	5		50
	Limestone, white	24		74
	Limestone, blue	6		80

NO ENVELOPE

~~ORIGINAL~~

COUNTY Cook INDEX NO. 2501
DRILL RECORD 1-36N-13E
(AXX187—30M) ILLINOIS GEOLOGICAL SURVEY, URBANA (10-40)

MATERIAL SAFETY DATA SHEET

GENIUM PUBLISHING CORPORATION
1145 CATALYN STREET
SCHENECTADY, NY 12303-1836 USA
(518) 377-8855

GENIUM PUBLISHING CORP.

NO. 1260

ISOPAR M

DATE September 1982

SECTION I. MATERIAL IDENTIFICATION

MATERIAL NAME: ISOPAR M
DESCRIPTION: A synthetic isoparaffinic hydrocarbon fluid, Av. Mole. Wt 191.
OTHER DESIGNATIONS: Saturated Hydrocarbon Solvent, Synthetic
MANUFACTURER: Exxon Co.
P.O. Box 2180
Houston, Texas 77001 Tel: (713) 656-3424

SECTION II. INGREDIENTS AND HAZARDS

	%	HAZARD DATA
ISOPAR M Typical Composition: Saturated hydrocarbons ----- 99.5% Aromatic hydrocarbons ------ 0.4% Total sulfur ---------- 1 ppm Peroxides ---------- < 1 ppm *Exxon Corp. Medical Research has recommended an 8-hr TWA value of 300 ppm or 5 mg/m^3, based on available toxicological data.	100	No TLV Established* Rat, Oral LD_{50} > 10 g/kg Rabbit, Dermal LD_{50} >3.1 g/kg

SECTION III. PHYSICAL DATA

Boiling point range, deg C ----- 207-254
Vapor pressure, 25C, mm Hg ----- <10
Vapor density (Air=1) ---------- 6.4
Solubility in water -------- negligible
Viscosity @ 25C, cSt ---------- 3.35
Specific gravity 15.6/15.6C ---- 0.784
Freeze point, deg C ---------- < -60
Evaporation rate (n-BuAc=1) ----- < 0.1
Molecular weight (Avg.)---------- 191

Appearance & Odor: Water-white liquid; nearly odorless or slight hydrocarbon odor.

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point and Method	Autoignition Temp.	Flammability Limits in Air	Lower	Upper
77C (170F) PMCC	338C ASTM D2155	% by Volume @ 21C	0.6	6.5

Extinguishing Media: Dry chemical, carbon dioxide, foam, water spray or fog.
An OSHA Class IIIA Combustible liquid. Water spray can be used to keep fire-exposed containers cool.
Firefighters should wear self-contained breathing apparatus for fighting fires in enclosed areas.

SECTION V. REACTIVITY DATA

This is a stable material in closed containers at room temperature under normal storage and handling conditions. It does not polymerize.
Incompatible with strong oxidizing agents such as chlorine, conc. oxygen, calcium hypochlorite, and nitric acid.
Thermal-oxidative degradation may yield carbon monoxide and partially oxidized hydrocarbons (fumes and smoke).

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NO. 1260

SECTION VI. HEALTH HAZARD INFORMATION

TLV Estimate 300ppm (See Sect II)

Not considered an inhalation hazard in ventilated areas due to low vapor pressure of ISOPAR M. Symptoms of overexposure to high airborne conc. when heated or misted, range from headache and dizziness to possible respiratory irritation and unconsciousness. Eye contact with liquid may cause conjunctivitis. Prolonged or repeated skin contact causes defatting effect, resulting in irritation, drying, cracking and dermatitis.

FIRST AID:

Eye Contact: Flush thoroughly with running water for 15 min. including under eyelids. Get medical help if irritation persists.

Skin Contact: Remove contaminated clothing. Wash affected area thoroughly with soap and water. Get medical help if large area of contact or if irritation persists.

Inhalation: Remove to fresh air. Restore and/or support breathing as required. (Administer oxygen if breathing difficult). Contact physician for further treatment, observation and support.

Ingestion: Do not induce vomiting. Contact physician immediately. Aspiration hazard. Give a few ounces of USP white mineral oil to drink.

SECTION VII. SPILL, LEAK, AND DISPOSAL PROCEDURES

Notify safety personnel of large leaks or spills. Remove sources of heat or ignition. Provide explosion-proof ventilation. Clean-up personnel need protection against inhalation and skin contact. Contain spill and recover free liquid if possible. Use absorbent (sand, earth, sawdust, etc) to clean up small spills and residues. Do not discharge into sewers or surface waters. (Notify authorities if product enters, or may enter, sewer or waterway.)

DISPOSAL: Waste material may be incinerated in an approved combustion chamber. Follow Federal, State, and Local regulations.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Provide general and local exhaust ventilation to keep airborne exposures at a low level. Do not exceed estimated TLV. Local exhaust hoods should have at least 60 fpm face velocity. Have air-supplied or self-contained respiratory apparatus available for non-routine or emergency use or when working in a confined or enclosed area. (Canister respirator may be suitable for short-time usage.)

Wear impermeable gloves and additional protective clothing to prevent prolonged or repeated skin contact. Use safety goggles and/or face shield for eye protection where splashing is possible. An eyewash station is desirable where splashing is probable.

Launder contaminated clothing before reuse. Thoroughly dry contaminated shoes before reuse.

SECTION IX. SPECIAL PRECAUTIONS AND COMMENTS

Store in closed containers in a cool, well-ventilated area away from sources of heat, sparks, flame ignition and strong oxidizing agents. Protect containers from physical damage. Keep containers closed when not in use. Use safety cans for small amounts.

Handling and storage conditions must be suitable for OSHA Class IIIA Combustible liquid.

Avoid inhalation of vapors. Avoid prolonged or repeated contact with skin. Prevent eye contact with liquid. Prohibit smoking or open lights in use areas. Ventilate area where used.

Follow good hygienic practice. Wash with soap and water after contact and several times a day when working with this solvent.

DOT Classification: COMBUSTIBLE LIQUID

DATA SOURCE(S) CODE: 1, 2, MSDS #334

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APPROVALS: MIS/CRD J.M. Nilsen

INDUST. HYGIENE/SAFETY 11-9-82

MEDICAL REVIEW: 22 November 1982

MATERIAL SAFETY DATA SHEET

GENIUM PUBLISHING CORPORATION
1145 CATALYN STREET
SCHENECTADY, NY 12303-1836 USA
(518) 377-8855

GENIUM PUBLISHING CORP.

No. 1259

ISOPAR L

Date May 1982

SECTION I. MATERIAL IDENTIFICATION

MATERIAL NAME: ISOPAR L
DESCRIPTION: A synthetic isoparaffinic hydrocarbon fluid, avg. mole. wt. 171
OTHER DESIGNATIONS: GE Material D5B91; Saturated Hydrocarbon Solvent, Synthetic
MANUFACTURER: Exxon Co.
P.O. Box 2180
Houston, Texas 77001
Tel: (713) 656-3424

SECTION II. INGREDIENTS AND HAZARDS

SECTION II. INGREDIENTS AND HAZARDS	%	HAZARD DATA
ISOPAR L	100	No TLV Established*
Typical Composition — Vol. % Saturated Hydrocarbons >99.8 Normal paraffins <0.05 Branched Saturates ca 92.7 Naphthenic ca 7 Sulfur <5 ppm		Rat, Oral LD_{50} >10g/kg Rabbit, Dermal LD_{50} >3.1 g/kg

*Exxon Corp. Medical Research has recommended an 8-hr TWA value of 300 ppm or 5 mg/m^3, based on available toxicological data.

SECTION III. PHYSICAL DATA

Boiling point range, deg C	185-211	Specific gravity, 15.6/15.6 C	0.77
Vapor pressure, 25C, mm Hg	<10	Volatiles, %	ca 100
Vapor density (Air=1)	5.7	Evaporation rate (n-BuAc=1)	<0.1
Solubility in water	Negligible	Freezing point, deg C	<-60
Viscosity, @ 15.5 C, cSt	2.6	Molecular weight (Avg)	171

Appearance & Odor: Water-white liquid, essentially odorless or slight paraffinic odor.

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point and Method	Autoignition Temp.	Flammability Limits In Air % by volume @ 25 C	LOWER	UPPER
61C (142F) TCC	338C (ASTM D2155)		0.6	6.5

Extinguishing Media: Dry chemical, carbon dioxide, foam, water spray or fog. This is an OSHA Class IIIA combustible liquid. Water spray can be used to keep fire-exposed containers cool. Material can be a dangerous fire hazard when heated.
Firefighters should wear self-contained breathing apparatus for fighting fires in enclosed areas.

SECTION V. REACTIVITY DATA

This is a stable material in closed containers at room temperature under normal storage and handling conditions. It does not polymerize.
Incompatible with strong oxidizing agents such as chlorine, conc. oxygen, calcium hypochlorite, and nitric acid.
Thermal-oxidative degradation may produce carbon monoxide and partially oxidized hydrocarbons.

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APPROVALS: MIS J. M. Nilson

CRD

Industrial Hygiene and Safety 5-12-82

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