

VOCs: (Volatile Organic Compounds)

LOW VOCs: 7.29% (64 g/L) - As tested by EPA Method Number 24

ULTRA LOW EVAPORATIVE EMISSIONS:

Less than 0.005 @ 76° Fahrenheit relative to n-butyl acetate (NBAC) = 1

KAURI BUTANOL VALUE: 61

(d'Limonene – KB - 56) – (Mineral Spirits – KB - 35)

SPECIFIC GRAVITY:

0.882 g/mL @ 25° C

DIELECTRIC STRENGTH: 42.2

BOILING POINT: 632° F

VAPOR PRESSURE:

<.04mm Hg @ 68° F

HIGH FLASH POINT:

Above 300° Fahrenheit

NON - TOXIC:

Oral toxicity/Rats: LD50-17.4 g/kg body weight
(Table Salt at 1.75 g/kg is ten (10) times more toxic)

READILY BIODEGRADABLE:

95% degraded in soil in 28 days

REPLACE D'LIMONENE:

In most applications with no harsh or strong odor

HIGHLY COMPATIBLE:

With many other solvents in formulations or microemulsions containing d'Limonene, NMP, mineral spirits and alcohols

SARA: (Superfund Amendments and Reauthorization Act)

TITLE III 313 – Not Reportable

TSCA: (Toxic Substance Control Act)

Listed in Inventory

SNAP: (Significant New Alternative Policy)

EPA listed as approved replacement chemical for solvent usage

HAPS: (Hazardous Air Pollutants)

Not Listed

HMIS: (Hazardous Materials Information System)

Health 0, Flammability 1, Reactivity 0



A multi-use solvent that addresses the environmental, regulatory, and safety issues facing solvent users today and in the future.

SG1000 is a bio-based, biodegradable, non-toxic, low VOC/high performing solvent that is derived from American grown soybeans. SG1000 soy methyl ester solvent is the “green” choice for solvents that meets stringent EPA clean air and other environmental challenges faced by today’s solvent users.

Comparison with Common Solvents

Solvent	Health (1)	Flammability (2)	Reactivity (3)
SOYGOLD 1000	0	1	0
SOYGOLD 1100	0	1	0
SOYGOLD 1500	0	1	0
SOYGOLD 2000	0	1	0
CANOLAGOLD 110	0	1	0
Mineral Spirits	0	2	0
VM&P Naphtha	1	3	0
Toluene	2	3	0
d'limonene	0	2	0

(1) Health as per HMIS regulation - 0 = Normal, 1 = Slightly Hazardous, 2 = Hazardous, 3 = Extreme Danger, 4 = Deadly.

(2) Flammability (Flash Point °F) as per HMIS regulation - 0 = Will not burn, 1 = Above 200°F, 2 = Above 100°F not exceeding 200°F, 3 = Below 73°F (Boiling Point at/above 100°F) and/or above 73°F not exceeding 100°F, 4 = Below 73°F (Boiling Point below 100°F).

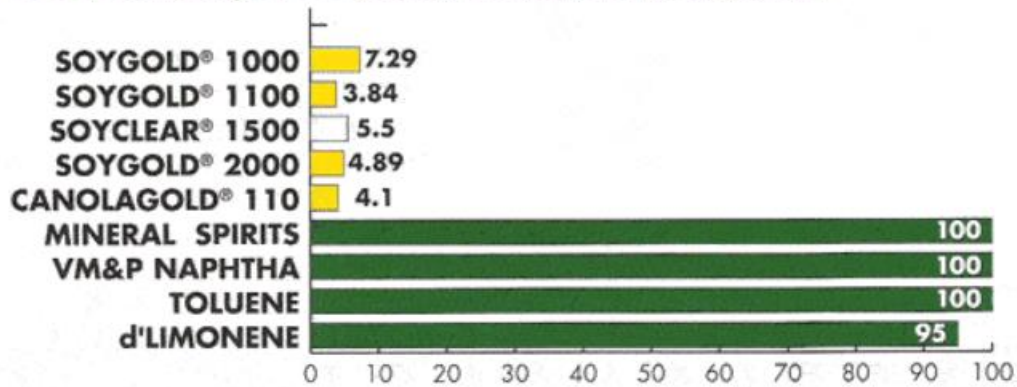
(3) Reactivity as per HMIS regulation - 0 = Stable, 1 = Unstable if heated, 2 = Violent chemical change, 3 = Shock/heat may detonate, 4 = May detonate

Solvent	Flash Closed Cup(°F)	Boiling Point(°F) @760mm HG	Evaporation Rate @ 25°C (NBAC=1.00)
SOYGOLD 1000	>300	632	<0.006
SOYGOLD 1100	>300	638	<0.005
SOYGOLD 1500	>300	634	<0.005
SOYGOLD 2000	>300	634	<0.005
CANOLAGOLD 110	>300	640	<0.002
Mineral Spirits	107	160-187	0.16
VM&P Naphtha	58	124-142	1.81
Toluene	40	110.6	2.00
d'limonene	121	175-176	0.005

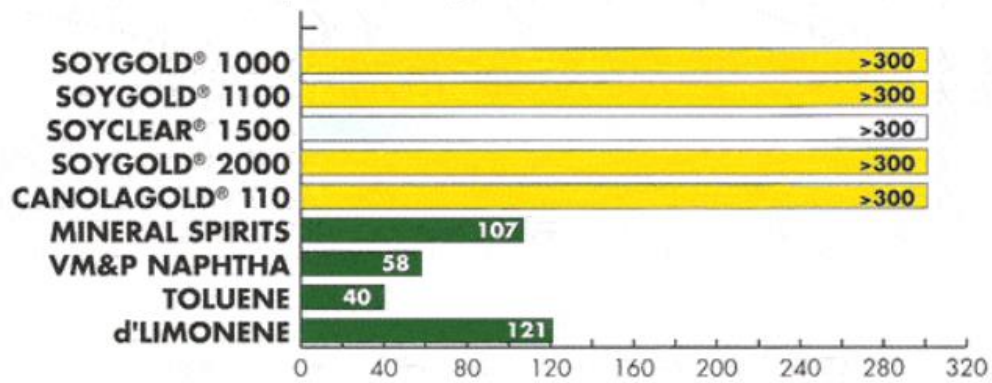
Solvent	Specific Gravity g/mL @ 25°C	Viscosity @ 25°C
SOYGOLD 1000	0.882	4.50
SOYGOLD 1100	0.880	4.50
SOYGOLD 1500	0.876	4.50
SOYGOLD 2000	0.882	4.72
CANOLAGOLD 110	0.876	4.50
Mineral Spirits	0.775	0.88
VM&P Naphtha	0.748	0.62
Toluene	0.863	0.57
d'limonene	0.843	3.50

Comparison Graphs – Comparison with Common Solvents

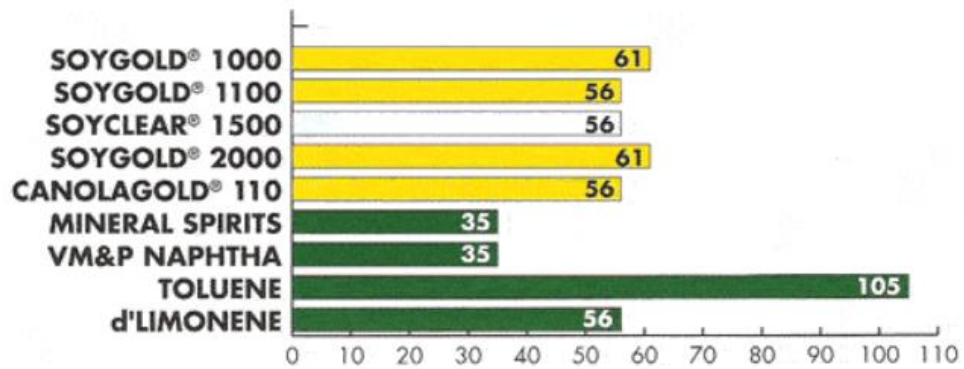
PERCENT VOC (Volatile Organic Compounds) As tested by EPA Method number 24



FLASH POINT CLOSED CUP (° FAHRENHEIT)



KAURI-BUTANOL VALUES



Microbial Limits

ACTS# (5100)	SoyGold 1000
Total Plate Count	est.<10 cfu/g
Yeast Count	<10 cfu/g
Mold Count	<10 cfu/g
<i>E. coli</i>	Negative
<i>Salmonella species</i>	Negative
<i>Staphylococcus aureus</i>	Negative
<i>Pseudomonas aeruginosa</i>	Negative

Rubber Compatibility

<u>RATING</u>	<u>RECOMMENDED AND APPROVED</u>
*A	Fluoroelastomer (FKM) - Viton
A	Epichlorohydrin (ECO/CO) - Hydrin
*AA	Fluoro Ethylene Propylene (FEP) - Teflon
A	Isobutylene Isoprene (IIR) - Butyl
A	Perfluorinated Elastomer (FFKM) - Chemraz
A	Perfluorinated Copolymer Elastomer (FFKM) - Kalraz
A	Fluorinated Copolymer (FXM) - Fluoraz
*A	Gylon - 3504, 3540, 3545, 3510 - Garlock Gylon

*Best for Service

NOT RECOMMENDED AND NOT APPROVED

NR	Nitrile (NBR) - Buna-N
NR	Nitrile (NBR) - Buna-N Blends
NR	Hydrogenated Nitrile (HNBR)
NR	Ethylene Acrylic (EAM) - (EA) - Vamac
NR	Chlorinated Polyethylene (CPE) (CM)
NR	Chlorosulfanated Polyethylene (CSM) - Hypalon
NR	Silicone (VMQ)
NR	Chloroprene or Polychloroprene (CR) - Neoprene
NR	Nitrile - Black (NBR)
NR	Nitrile - White (NBR)
NR	Styrene Butadiene (SBR) - Buna-S
NR	Polyacrylate (ACM)
NR	Polyurethane (AU) (EU)
NR	Polybutadiene or Butadiene (BR)
NR	Modified Polyethylene (AQP) - Aero Quip
NR	Synthetic Isoprene (IR) - Synthetic Rubber

NOT RECOMMENDED BUT MARGINAL

B	X-Link Polyethylene (XLPE)
B	Ethylene Propylene (EPDM)
B	Ethylene Propylene (EP)

Replacing Regulated Solvents Using Hansen Solubility Parameters

CGS Units

Solvent	SP _h	SP _p	SP _d
Propylene Carbonate	2.0	8.8	9.8
PM	8.0	4.6	7.8
NMP	3.5	6.0	8.8
DPM	6.3	2.4	7.4
MeCl ₂	3.0	3.1	8.9
Acetone	3.4	5.1	7.6
PtB	6.0	2.1	7.3
PM Acetate	3.0	1.8	8.8
TPM	5.7	2.0	7.4
DPtB	5.4	1.8	7.3
Aromatic 150	1.5	0.5	8.9
DPM Acetate	4.0	1.9	7.4
1,1,1 Trichloroethane	1.0	2.1	8.3
d' limonene	0.0	0.3	8.1
SoyGold 1000	2.9	2.4	7.9
Exxate 1000	1.5	2.8	7.3
CFC-113	0.0	1.0	7.5
Isopar L	0.0	0.0	7.3

SP_h = Hydrogen BondingSP_d = DispersionSP_p = Polarity