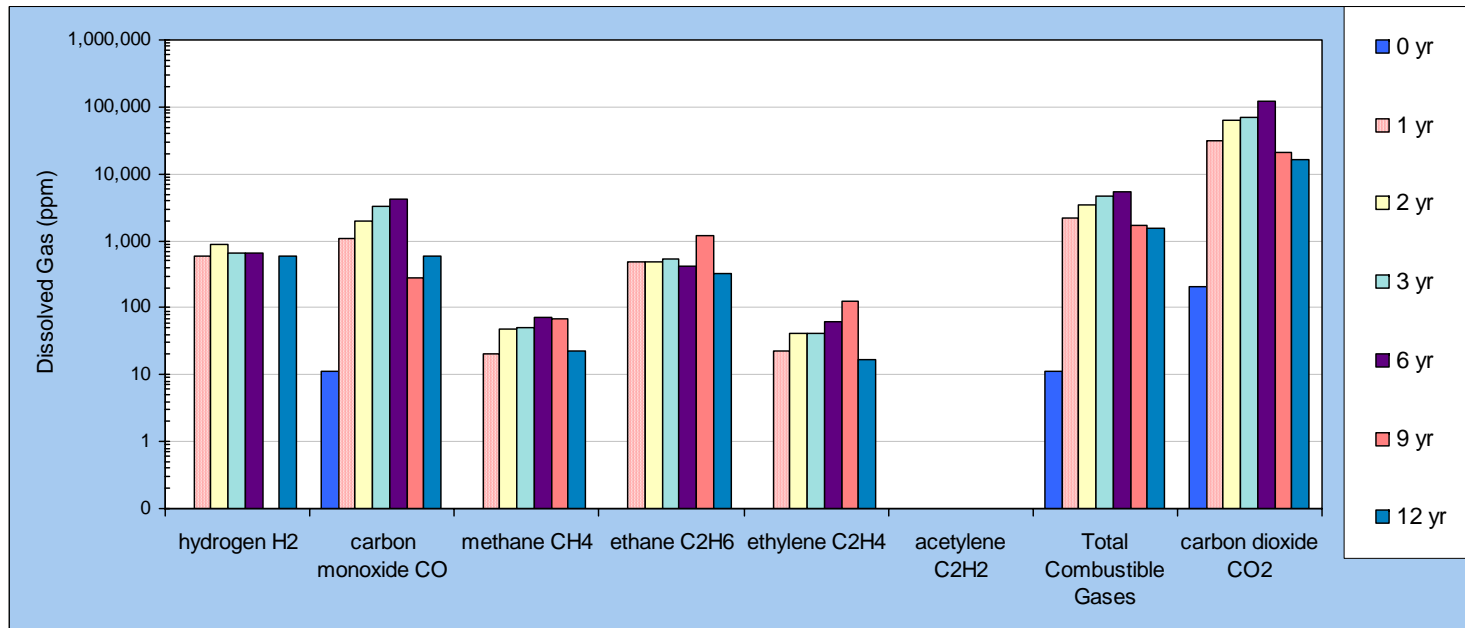


Sealed Tube Accelerated Aging Test: Natural Ester at 137 °C

Equivalent IEEE years	0 yr	1 yr	2 yr	3 yr	6 yr	9 yr	12 yr
ppm hours	0	672	1344	2016	4032	6062	8064
hydrogen H ₂		593	878	645	661		605
carbon monoxide CO	11	1,105	2,015	3,333	4,134	275	579
methane CH ₄		20	47	50	72	69	23
ethane C ₂ H ₆		495	483	535	424	1,219	326
ethylene C ₂ H ₄		23	41	42	61	124	17
acetylene C ₂ H ₂							
Total Combustible Gases	11	2,236	3,464	4,605	5,352	1,687	1,550
carbon dioxide CO ₂	208	31,496	63,638	69,799	119,750	21,410	16,622
oxygen O ₂	4,065	563	701	nd	600	13,450	2,122
nitrogen N ₂	42,998	71,724	81,027	90,857	6,532	124,006	34,989
Total Dissolved Gases	47,282	106,019	148,830	165,261	132,234	160,553	55,283



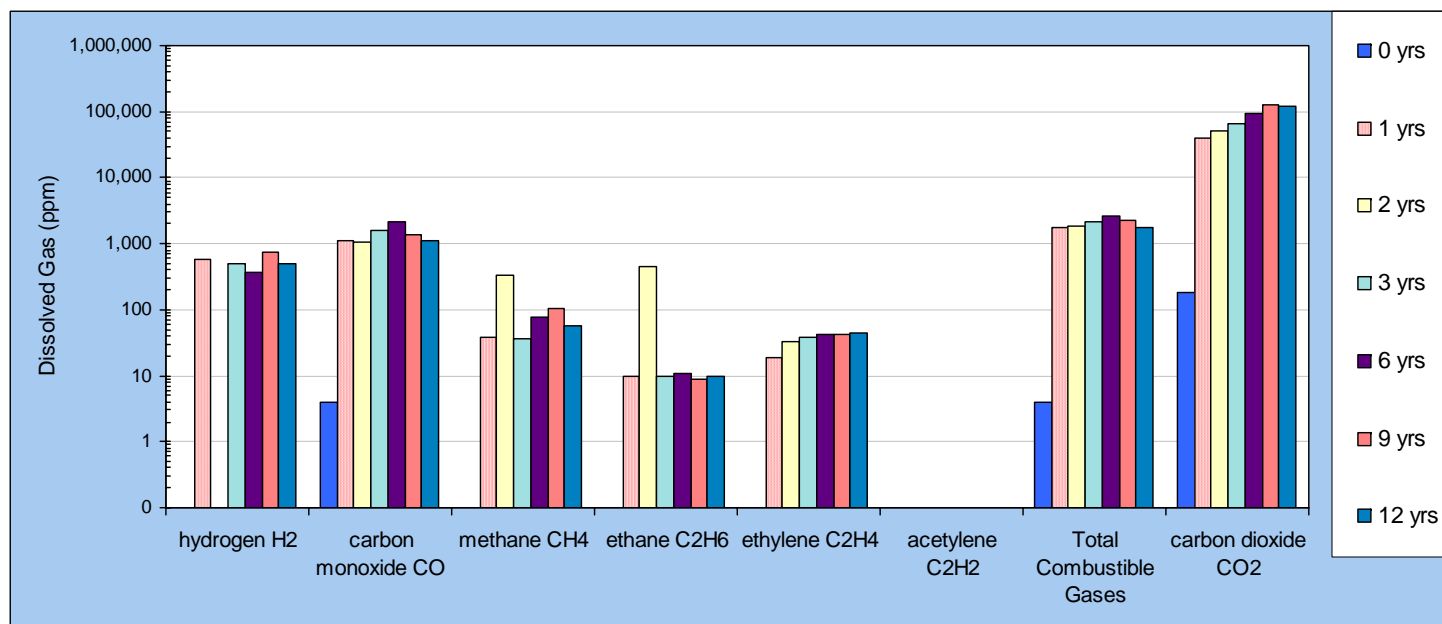
Sealed Tube Accelerated Aging Test: Natural Ester at 137 °C

C57.104 Table 1 “Condition” from dissolved gas data

Gas	0 yr	1 yr	2 yr	3 yr	6 yr	9 yr	12 yr
H ₂	1	2	3	2	2	1	2
CH ₄	1	1	1	1	1	1	1
C ₂ H ₂	1	1	1	1	1	1	1
C ₂ H ₄	1	1	1	1	2	3	1
C ₂ H ₆	1	4	4	4	4	4	4
CO	1	3	4	4	4	1	3
CO ₂	1	4	4	4	4	4	4
TDCG	1	3	3	3	4	2	2

Sealed Tube Accelerated Aging Test: Mineral Oil at 137 °C

Equivalent IEEE years	0 yrs	1 yrs	2 yrs	3 yrs	6 yrs	9 yrs	12 yrs
ppm hours	0	672	1344	2016	4032	6062	8064
hydrogen H ₂		581		498	371	750	492
carbon monoxide CO	4	1,106	1,039	1,605	2,175	1,376	1,139
methane CH ₄		38	331	37	78	106	57
ethane C ₂ H ₆		10	445	10	11	9	10
ethylene C ₂ H ₄		19	33	39	42	43	44
acetylene C ₂ H ₂							
Total Combustible Gases	4	1,754	1,848	2,189	2,677	2,284	1,742
carbon dioxide CO ₂	183	39,162	51,354	65,724	91,835	123,888	122,048
oxygen O ₂	4,885	1,680	4,837	445	3,515	2,323	2,387
nitrogen N ₂	70,768	93,340	61,640	89,765	1,579	76,971	47,404
Total Dissolved Gases	75,840	135,936	119,679	158,123	99,606	205,466	173,581



Sealed Tube Accelerated Aging Test: Mineral Oil at 137 °C

C57.104 Table 1 “Condition” from dissolved gas data

Gas	0 yrs	1 yrs	2 yrs	3 yrs	6 yrs	9 yrs	12 yrs
H ₂	1	2	1	2	2	3	2
CH ₄	1	1	2	1	1	1	1
C ₂ H ₂	1	1	1	1	1	1	1
C ₂ H ₄	1	1	1	1	1	1	1
C ₂ H ₆	1	1	4	1	1	1	1
CO	1	3	3	4	4	3	3
CO ₂	1	4	4	4	4	4	4
TDCG	1	2	2	3	3	3	2