

# DUPONT™ KRYTOX® LUBRICANTS

## COMPATIBILITY WITH GASES

Below list shows DuPont™ Krytox® lubricants compatibility with different gases.

No.	Name	Formula	R#	Non-reactive
1	Acetylene	C <sub>2</sub> H <sub>2</sub>		N
2	Ammonia	NH <sub>3</sub>		N
3	Argon	Ar		N
4	Arsine	AsH <sub>3</sub>		N
5	Boron trichloride	BCl <sub>3</sub>		U
6	Boron trifluoride	BF <sub>3</sub>		U
7	Bromochlorodifluoromethane	CBrClF <sub>2</sub>	R12B1	D
8	Bromotrifluoromethane	CBrF <sub>3</sub>	R13B1	D
9	Bromotrifluoroethylene	C <sub>2</sub> BrF <sub>3</sub>	R123B1	N
10	Butadiene(1,2)	C <sub>4</sub> H <sub>6</sub>		N
11	Butadiene(1,3)	C <sub>4</sub> H <sub>6</sub>		N
12	Butane	C <sub>4</sub> H <sub>10</sub>		N
13	Butene	C <sub>4</sub> H <sub>8</sub>		N
14	Butene cis	C <sub>4</sub> H <sub>8</sub>		N
15	Butene trans	C <sub>4</sub> H <sub>8</sub>		N
16	Carbon dioxide	CO <sub>2</sub>		N <sup>1</sup>
17	Carbon monoxide	CO		N
18	Tetrafluoromethane	CF <sub>4</sub>	R14	D
19	Carbonyl sulphide	COS		N
20	Chlorine	Cl <sub>2</sub>		N
21	Chlorodifluoromethane	CHClF <sub>2</sub>	R22	D
22	Chloromethane	CH <sub>3</sub> Cl	R40	D
23	Chloropentafluoroethane	C <sub>2</sub> ClF <sub>5</sub>	R115	D
24	Chlorotetrafluoroethane	C <sub>2</sub> HClF <sub>4</sub>	R124	D
25	Chlorotrifluoroethane	C <sub>2</sub> H <sub>2</sub> ClF <sub>3</sub>	R133a	D
26	Chlorotrifluoroethylene	C <sub>2</sub> ClF <sub>3</sub>	R1113	D
27	Chlorotrifluoromethane	CClF <sub>3</sub>	R13	D
28	Cyclopropane	C <sub>3</sub> H <sub>6</sub>		N
29	Deuterium	D <sub>2</sub>		N
30	Dibromodifluoromethane	CBr <sub>2</sub> F <sub>2</sub>	R12B2	N
31	Dibromotetrafluoroethane	C <sub>2</sub> Br <sub>2</sub> F <sub>4</sub>	R114B2	N
32	Diborane	B <sub>2</sub> H <sub>6</sub>		N
33	Dichlorodifluoromethane	CCl <sub>2</sub> F <sub>2</sub>	R12	D
34	Dichlorofluoromethane	CHCl <sub>2</sub> F	R21	D
35	Dichlorosilane	SiH <sub>2</sub> Cl <sub>2</sub>		N
36	Dichlorotetrafluoroethane	C <sub>2</sub> Cl <sub>2</sub> F <sub>4</sub>	R114B2	D
37	Dicyanogen	C <sub>2</sub> N <sub>2</sub>		N

N: Non-reactive

N<sup>1</sup>: Soluble in supercritical CO<sub>2</sub>

N<sup>2</sup>: No reaction at 200 °C

D: Dissolved

U: Uncertain

## DUPONT™ KRYTOX® LUBRICANTS COMPATIBILITY WITH DIFFERENT GASES

No.	Name	Formula	R#	Non-reactive
38	Difluoro(1,1)-1-chloroethane	C <sub>2</sub> H <sub>3</sub> ClF <sub>2</sub>	R142b	D
39	Difluoroethane(1,1)	C <sub>2</sub> H <sub>4</sub> F <sub>2</sub>	R152a	D
40	Difluoroethylene(1,1)	C <sub>2</sub> H <sub>2</sub> F <sub>2</sub>	R132a	N
41	Dimethylamine	C <sub>2</sub> H <sub>7</sub> N		N
42	Dimethylether	C <sub>2</sub> H <sub>6</sub> O		N
43	Disilane	Si <sub>2</sub> H <sub>6</sub>		N
44	Ethane	C <sub>2</sub> H <sub>6</sub>		N
45	Ethylamine	C <sub>2</sub> H <sub>7</sub> N		N
46	Ethyl chloride	C <sub>2</sub> H <sub>5</sub> Cl	R160	N
47	Ethylene	C <sub>2</sub> H <sub>4</sub>		N
48	Ethylene oxide	C <sub>2</sub> H <sub>4</sub> O		N
49	Fluorine	F <sub>2</sub>		N <sup>2</sup>
50	Fluoroethane	C <sub>2</sub> H <sub>5</sub> F	R161	N
51	Fluoromethane	CH <sub>3</sub> F	R41	N
52	Trifluoromethane	CHF <sub>3</sub>	R23	D
53	Germane	GeH <sub>4</sub>		N
54	Helium	He		N
55	Hexafluoroethane	C <sub>2</sub> F <sub>6</sub>	R116	N
56	Hexafluoropropene	C <sub>3</sub> F <sub>6</sub>		N
57	Hydrogen	H <sub>2</sub>		N
58	Hydrogen bromide	HBr		N
59	Hydrogen chloride	HCl		N
60	Hydrogen cyanide	HCN		N
61	Hydrogen fluoride	HF		N
62	Hydrogen iodide	HI		N
63	Hydrogen sulfide	H <sub>2</sub> S		N
64	Iso-butane	C <sub>4</sub> H <sub>10</sub>		N
65	Iso-butylene	C <sub>4</sub> H <sub>8</sub>		N
66	Krypton	Kr		N
67	Methane	CH <sub>4</sub>		N
68	Methylacetylene	C <sub>3</sub> H <sub>4</sub>		N
69	Methylbromide	CH <sub>3</sub> Br		N
70	Methylmercaptan	CH <sub>4</sub> S		N
71	Methylsilane	CH <sub>6</sub> Si		N
72	Methylamine	CH <sub>5</sub> N		N
73	Neon	Ne		N
74	Nitric oxide	NO		N
75	Nitrogen	N <sub>2</sub>		N
76	Nitrogen dioxide	NO <sub>2</sub> /N <sub>2</sub> O <sub>4</sub>		N

N: Non-reactive

N<sup>1</sup>: Soluble in supercritical CO<sub>2</sub>

N<sup>2</sup>: No reaction at 200 °C

D: Dissolved

U: Uncertain

## DUPONT™ KRYTOX® LUBRICANTS COMPATIBILITY WITH DIFFERENT GASES

No.	Name	Formula	R#	Non-reactive
77	Nitrous oxide	N <sub>2</sub> O		N
78	Nitrogen trifluoride	NF <sub>3</sub>		N
79	Octafluoro-butene	C <sub>4</sub> F <sub>6</sub>		N
80	Octafluoro-cyclobutane	C <sub>4</sub> F <sub>8</sub>		N
81	Octafluoro propane	C <sub>3</sub> F <sub>8</sub>		N
82	Oxygen	O <sub>2</sub>		N
83	Phosgene	COCl <sub>2</sub>		N
84	Phosphine	PH <sub>3</sub>		N
85	Propane	C <sub>3</sub> H <sub>8</sub>		N
86	Propadiene	C <sub>3</sub> H <sub>4</sub>		N
87	Propylene	C <sub>3</sub> H <sub>6</sub>		N
88	Propylene oxide	C <sub>3</sub> H <sub>6</sub> O		N
89	Silane	SiH <sub>4</sub>		N
90	Silicon tetrachloride	SiCl <sub>4</sub>		N
91	Silicon tetrafluoride	SiF <sub>4</sub>		N
92	Sulphur hexafluoride	SO <sub>2</sub>		N
93	Sulphur hexafluoride	SF <sub>6</sub>		N
94	Sulphur tetrafluoride	SF <sub>4</sub>		N
95	Tetrafluoroethylene	C <sub>2</sub> F <sub>4</sub>	R114	N
96	Trichlorosilane	SiHCl <sub>3</sub>		N
97	Trichloro-trifluoro ethane	C <sub>2</sub> Cl <sub>3</sub> F <sub>3</sub>	R113	D
98	Trifluoroethane(1.1.1)	C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>	R143a	D
99	Trimethylamine	C <sub>3</sub> H <sub>9</sub> N		N
100	Tungsten hexafluoride	WF <sub>6</sub>		N
101	Vinyl bromide	C <sub>2</sub> H <sub>3</sub> Br	R140B1	N
102	Vinyl chloride	C <sub>2</sub> H <sub>3</sub> ClF <sub>2</sub>	R140	N
103	Vinyl fluoride	C <sub>2</sub> H <sub>3</sub> F	R141	N
104	Xenon	Xe		N

N: Non-reactive

N<sup>1</sup>: Soluble in supercritical CO<sub>2</sub>

N<sup>2</sup>: No reaction at 200 °C

D: Dissolved

U: Uncertain

# DuPont Performance Lubricants

**Extreme Conditions. Extreme Performance.**

For product information, industry applications, technical assistance, or global distributor contacts, visit [krytox.com](http://krytox.com) or within the U.S. and Canada, call **1-800-424-7502**.

Copyright © 2013 DuPont. The DuPont Oval Logo, DuPont™, The miracles of science™, and Krytox® are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.

K-26901 (09/13) Printed in the U.S.A.

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Because conditions of use are outside our control, DuPont makes no warranties, express or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents or trademarks.



*The miracles of science™*