

Table 1: Ozonation of enol ethers, reaction conditions and results

Entry	Enol ether	Reaction conditions				Reaction products		
		amount (g; mmol)	solvent (ml)	ozonation temp. (°C)	ozonation time (min)	ozonide (%)	Baeyer-Villiger product (%)	vic. di- or tri- carbonyl compound (%)
1	1b	1.8; 9	CCl ₄ , 50	-15	24 ^{a)}	100	/	/
2	13	2.2; 17	CDCl ₃ , 90	-65	9	65.4 + 23 ^{b)}	/	11.6 ^{c)}
3	16a	1.7; 9	CH ₂ Cl ₂ , 70	-70	5	/	100 ^{d)}	/
4	16b	0.6; 3.4	CH ₂ Cl ₂ , 50	-70	2	/	98 ^{d)}	/
5	19c	0.55; 2.9	CH ₂ Cl ₂ , 50	-70	1.5	/	99 ^{d)}	/
6		0.38; 2	[CH ₂ Cl ₂ , 30, HCO ₂ Me, 30]	-70	1.25	/	82 ^{d)}	18 ^{d)}
7	19d	2.16; 10	CH ₂ Cl ₂ , 50	-70	5.5	/	92 ^{e)}	/
8		2.5; 11.6	[CH ₂ Cl ₂ , 30, HCO ₂ Me, 30]	-70	6.75		96	4
9	24	7.1; 50	CH ₂ Cl ₂ , 60	-70	25	54	f)	f)
10		1.42; 10	CDCl ₃ , 10	-70	5	52 ^{g)}	30 ^{g)}	/
11	28	no conversion between -70°C and RT in CH ₂ Cl ₂ , even not with 10-fold excess of ozone						

a) fivefold amount; b) mixture of two isomeric ozonides; c) deoxygenation of the part of isomeric ozonides in 40 ml (corresponding to 6.68 mmol ozonide mixture) crude ozonation solution by means of triphenyl phosphine (1.75 g, 6.68 mmol) in dichloromethane (20 ml) at RT yields 0.76g (100%) **15** (enol isomer); d) characterisation by methanol addition and subsequent ¹H-NMR analysis; e) not optimised; f) mixture after deoxygenation with triphenyl phosphine (7.1 g, 27 mmol) in dichloromethane (50 ml) at 0°C and distillation: red oil, 4.9g bp_{15 Torr} 30-35°C; g) ¹H-NMR analysis