

DIN EN ISO 18363-2:2025-04 (E)

Animal and vegetable fats and oils - Determination of fatty-acid-bound chloropropanediols (MCPDs) and glycidol by GC/MS - Part 2: Method using slow alkaline transesterification and measurement for 2-MCPD, 3-MCPD and glycidol (ISO 18363-2:2025)

Contents		Page
European foreword.....		3
Foreword.....		4
Introduction.....		5
1	Scope	7
2	Normative references	7
3	Terms and definitions	7
4	Principle	8
5	Reagents	9
5.1	General.....	9
5.2	Solvents and chemicals.....	9
5.3	Standard and reference compounds.....	9
5.4	Working solutions.....	10
5.5	Other solutions.....	10
6	Apparatus	10
7	Sample	11
7.1	Sampling.....	11
7.2	Preparation of the test sample.....	11
8	Procedure	11
8.1	Spiking with surrogate standard and homogenization.....	11
8.2	Ester cleavage and glycidol transformation.....	11
8.3	Matrix removal.....	12
8.4	Derivatization.....	12
8.5	Gas chromatography/mass spectrometry references.....	12
9	Expression of results	13
9.1	Determination of bound glycidol.....	13
9.2	Determination of bound 2-MCPD.....	14
9.3	Determination of bound 3-MCPD.....	15
9.4	Determination of the degree of diester cleavage.....	15
9.5	Quality control.....	15
10	Notes	16
Annex A (informative) Examples of relevant chromatograms and data evaluation using “low-MCPD” palm oil		18
Annex B (informative) Results of interlaboratory tests		25
Bibliography		27