

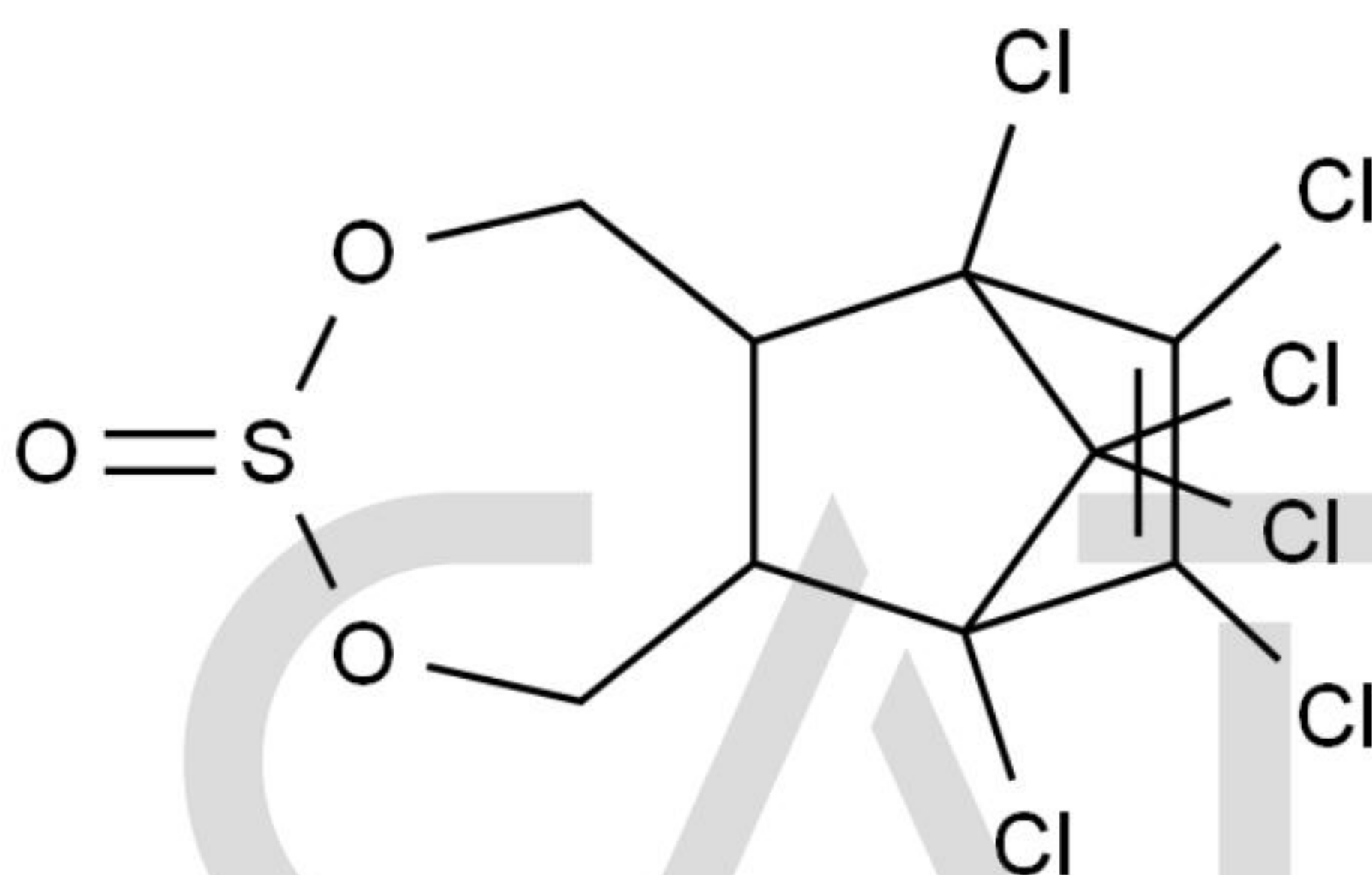
Certificate of Analysis

Reference Material & Standard

Product Name:	Endosulfan (Mixture of Diastereomers)	Catalogue Number:	CCPD100357
Synonyms:	N/A	Lot Number:	144-11-37-1
CAS Number:	115-29-7	Expiry Date:	Apr 08, 2028
Molecular Formula:	C ₉ H ₆ Cl ₆ O ₃ S	Storage:	2°C ~ 8°C Protected from light and Sealed
Molecular Weight:	406.93	Warning:	



Chemical Structure:



Test Items	Method	Results
Appearance	Visual inspection	Off-White Solid
Identification	GCMS&HNMR	Confirmed
Purity	GC	98.481%
Water Content	Karl Fischer	0.15%
Assay		98.3%
Uncertainty		±2.0%

Comment:

- Endosulfan is mixture of enantiomers and ratio of isomers: cisA65.874%, transB32.607%.
- The calculation of the 100% method follows the formula (calculated on the non-dried basis):

$$\text{Assay (\%)} = (100\% - \text{Water Content}) * \text{Purity GC (\%)} / 100\%$$
 Water Content is considered as absolute effect, GC purity is considered as relative effect.
- The uncertainty values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Signature:

Prepared by:

Nice

Reviewed by:

Hinlam

Aproved by General Manager:

David

Date: Apr 09, 2024

Date: Apr 09, 2024

Date: Apr 09, 2024

