

Products for Synthesis

Manual 85/86

Products for Synthesis

Manual 85/86

MERCK-Schuchardt

Your Partner for Synthesis

Dear Customer,

we are very pleased to introduce our new MERCK-Schuchardt Manual. This reference book intends to facilitate your daily work and gives professional assistance for handling our wide range of products for synthesis: chemical and physical data, structural formulae and literature references. The high purity of our products is stated by specifications indicating minimum assay.

This manual does not only provide actual data on chemical and physical properties, but also useful information on safe handling of dangerous chemicals. Therefore we have listed additional safety data such as:

Flash points	Toxicity data according to RTECS
Ignition temperatures	Risk and safety phrases
Explosive limits	Literature references (e. g. Sax
Hazard classification	and Merck Index)

A number of additional and practical tables regarding laboratory gases, solvents, CAS-numbers etc. as well as lists of products according to applications resp. to functional groups complete this manual.

The well-known MERCK-Schuchardt delivery service offers a fast, safe and reliable supply of standard packages and bulk quantities.

We are looking forward to a further pleasant cooperation and remain as your partner for synthesis,

very truly yours,

Dr. Theodor Schuchardt & Co.

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Partner for synthesis — what does this mean?

This cannot only be drawn up — partnership has to grow, has to be developed, it has to be supported and cultivated.

A steady dialogue between customers and supplier is one part of it — the understanding regarding difficulties, the search for solving problems is another. High qualification of the Schuchardt people is therefore a prerequisite.

Trustworthiness is also of high value, whether it concerns product specifications, delivery affirmations or product information — we want to help our partners.

These are our main ideas regarding partnership.

Our performance — product range and service

We know our partners's needs:

1. a range matching the demands of the market
2. an actual and extensive product information to be checked at a glance
3. a quick, safe and reliable supply 98 % of all products are in stock
4. effective assistance and active support in cases of special requests, such as special quantities, special qualities or even products not included in our range.
5. specialists who know what they are talking about.

Your business partners

Sales Department — the intermediate between customer and manufacturer. Our staff will be assisting you with all their product knowledge and experience. For urgent needs please contact your local MERCK agency.

Scientific Product Information — the link between research and application. A skilled and experienced staff will give you the opportunity to discuss problems and ask questions. New ideas will be examined, new products developed. However, new items have to be introduced:

MERCK-Schuchardt's MS INFO provides a relevant selection of examples taken from recent literature with special emphasis on preparative applications. This new series of scientific data sheets on selected reagents for synthesis intends to help chemists in research and development.

Further information concerning MERCK-Schuchardt products is published in MERCK-Spectrum, a journal appearing several times per year.

The way we do it

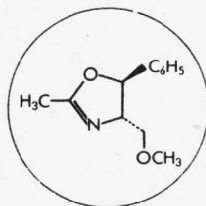
A well trained and skilled staff as well as more than 100 years of experience as a supplier of fine chemicals help us to perform these tasks.

As a small company with an efficient organisation we are able to fulfill our customers' requests. Being part of the Merck group, a worldwide operating company, we make use of all advantages to the benefit of our customers.

The quality of our products is standardized according to stringent Merck specifications allowing reproducible results — a particular advantage in case of upscaling from laboratory to pilot plant.

Meyers' Reagent for Asymmetric Synthesis

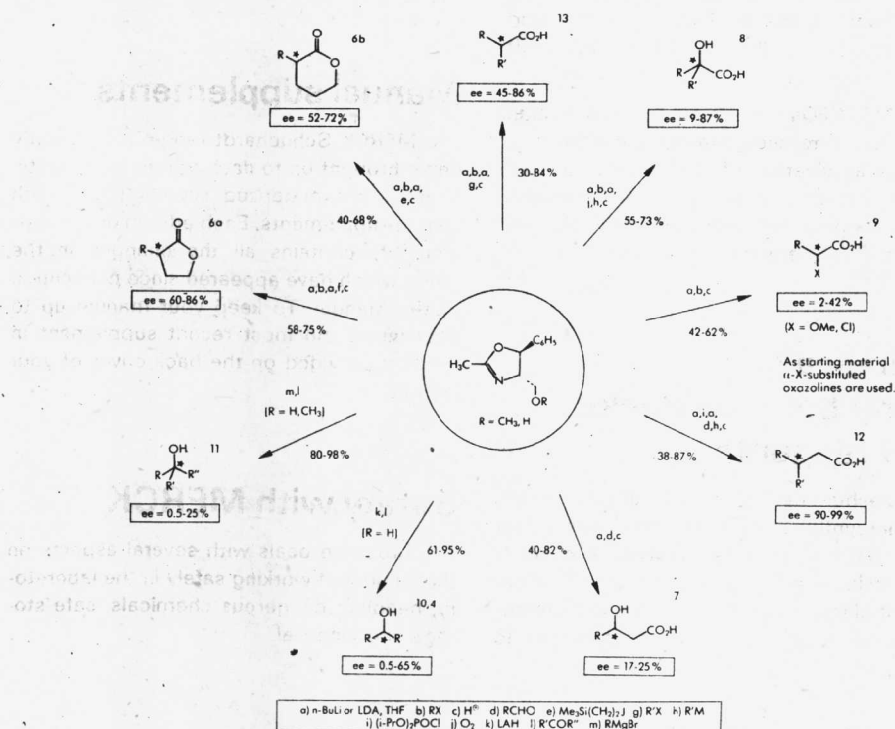
(4S,5S)-(-)-4,5-Dihydro-4-methoxy-methyl-2-methyl-5-phenyloxazol



Cat. No. 818216
1 ml

Since the first reported oxazoline mediated asymmetric synthesis in 1974¹, considerable attention has been given to the development and utilization of these versatile chiral auxiliaries. The title reagent is prepared from the enantiomerically pure aminodiol (1S,2S)-(+)-2-amino-1-phenyl-1,3-propanediol², a by-product of the chloramphenicol synthesis and another useful

compound of our new range "Chiralica®". The pioneering work of Meyers et al.³⁻⁵ in the field of stoichiometric asymmetric synthesis and thus the variety of compounds capable of being produced from this heterocycle, both with high chemical and optical yields, is demonstrated in the following scheme.



Further information

Please use the advertising cards on the following page if you require more information.

MS INFO leaflets for collection

Modern reagents contribute new aspects to the concept of organic syntheses. With their use, some synthesis steps have become possible and others more selective and milder. In some cases higher yields have been obtained. As there are a great number of publications nowadays it is becoming more difficult to keep up with the information. To help the chemist, we have published occasional information sheets in English on selected reagents from the MERCK-Schuchardt range.

In the MS INFOs there is a relevant selection of modern reference examples on the preparative application of the respective substance. In addition to chemical equations and comments, reaction conditions as well as yield and references are given.

Chiralica® chiral building blocks and reagents

The brochure describes over 100 compounds for the synthesis of chiral molecules. Apart from modern reagents, catalysts and building blocks, the range also includes a selection of classical resolution reagents. Stereoformulae, specifications and references to

current monographs and original references are included.

To be published 1985.

Catalysts for heterogeneous, homo- geneous and phase- transfer catalysis

Contains 90 catalysts with references, an overview of the most important monographs for heterogeneous and homogeneous catalysis as well as a comprehensive description of phase-transfer catalysis, Kryptofix® and crown-ether ligands.

New edition: in preparation.

Manual supplements

The MERCK-Schuchardt range is constantly being brought up to date with new products. These are summarized several times each year in supplements. Each edition of the supplements contains all the changes in the range which have appeared since publication of the manual. To keep your manual up to date insert the most recent supplement in the flap provided on the back cover of your manual.

Safety with MERCK

The brochure deals with several aspects on the subject of working safely in the laboratory, handling dangerous chemicals, safe storage and disposal.

How to use this manual

With this manual we would like to contribute to simplifying your work in the laboratory, factory and storehouse. The manual answers questions which arise in daily practice when handling chemicals. In order to facilitate access to this information, we have divided the manual into a systematic green section and a white section which is arranged in alphabetical order. On the following pages you will find the "General terms of sale" and "Special notes" which deal with general and commercial questions. The "technical" information which is dealt with in detail follows. For the respective pages please refer to contents page 2–3.

1. Safety label

Our labels are drawn up in accordance with the guidelines of the "Verordnung über gefährliche Arbeitsstoffe (Arbeitsstoffverordnung)" (regulations for hazardous substances [chemical regulations]). You are thus provided with important criteria for safe handling of our chemicals.

2. Notes on risks and advice on safety

Here you will find the notes on risks (R phrases) and advice on safety (S phrases) stipulated by the "Arbeitsstoffverordnung" as well as the hazard symbols and their meanings.

3. Carcinogenic substances

This list comprises substances which are considered to cause malignant tumors in man and must therefore be handled with particular care. A comprehensive description

of the safety measures to be observed is to be found in our "Safety with Merck" brochure which we will provide on request.

4. Elimination of risks

Here you will find recommendations for dealing with spillages of dangerous liquids and methods to determine and eliminate peroxides in organic solvents.

5. Laboratory gases — Safe handling

Here you will find some general advice on the safe handling of laboratory gases: handling compressed gases, warnings and advice on withdrawal from lecture bottles and steel cylinders.

6. New entries

The summary contains all products which have been added since the previous catalogue was published

Green section systematic index

7. Product groups

In this section, the products are listed according to techniques in organic synthesis e.g.:

- catalysis
- organometallic synthesis
- asymmetric synthesis

This section also includes a summary of name reagents and common reagent abbreviations. In order to facilitate access to the