







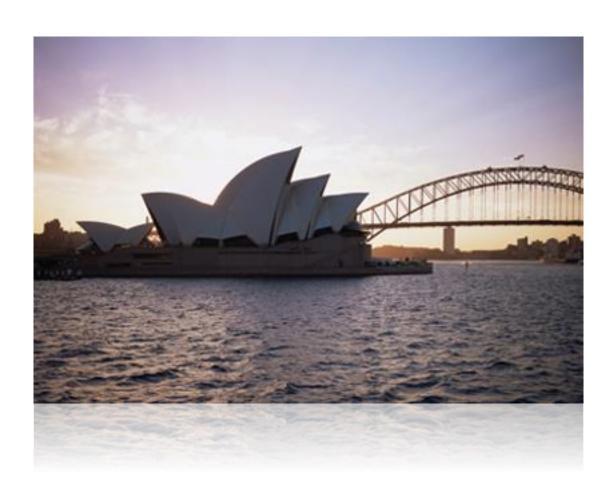


KIRSCH PHARMA WORLDWIDE

























INTERNATIONAL WAREHOUSING









FOOD AND PHARMA













PRODUCTION











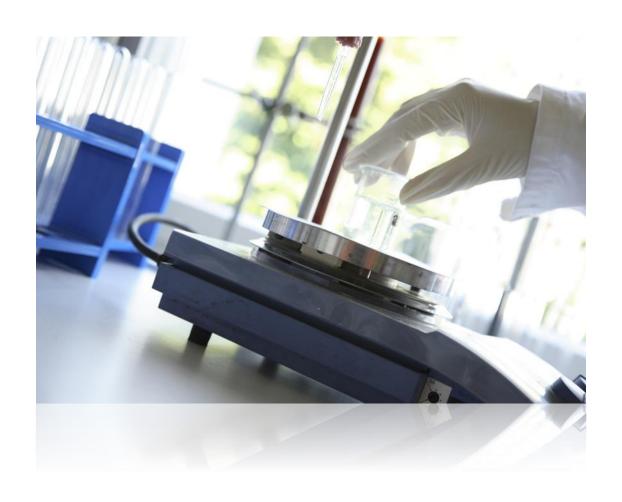




QUALITY ASSURANCE SYSTEM









QUALITY MANAGEMENT















CONTENT



















KIRSCH PHARMA WORLDWIDE

- Founded 1980
- Privately owned by Heinz-Jürgen Kirsch
- International subsidiaries and warehousing
- Worldwide sourcing
- Sales to 85 countries
- Member of ipec EUROPE
 - The International Pharmaceutical **Excipients Council EUROPE**













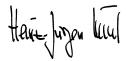






KIRSCH PHARMA WORLDWIDE

»I will always devote our full energy to the prompt fulfilment of your needs at the highest quality level.«













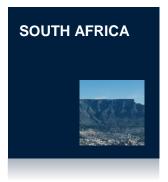


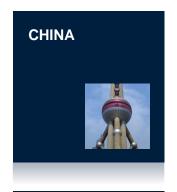


INTERNATIONAL SUBSIDIARIES AND WAREHOUSING



















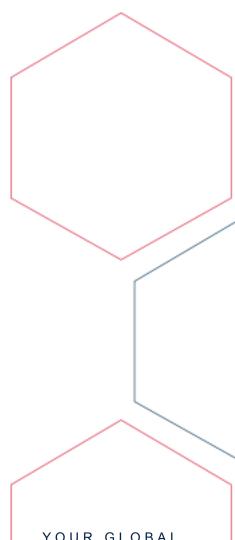


BUSINESS AREAS

Raw materials and semifinished products

























NUTRITION

Raw materials for:

- Infant formula
- Dietetic salts
- Nutritional supplements
- Nutraceuticals
- Fermentation, Purification and Stabilisation of enzymes





















PHARMA

Raw materials for:

- Dialysis and Infusion Solutions
- Tablets and Powders
- Ointments
- Oral Rehydration Salts
- Cell Cultivation and Fermentation
- Peptide Purification





















TRADING COMPANY



BUSINESS MODEL KIRSCH PHARMA

Added Value:

- Analytics of products
- Co-Producer management
- Full documentation
- Physical modification
- Special packaging
- Warehousing
- Consolidated Purchasing Concept
- Competent customer support

























GLOBAL CO-PRODUCER NETWORK

- Worldwide presence
 - Global sourcing with emphasis on Europe, East Asia and USA
- Global consolidated purchasing
 - Coordination within subsidiary network
- Strategic purchasing alliances
- Quality agreements incl. change control
- Supplier qualification
 - Experienced certified audit team









PRODUCTION

- Physical modification (Blending, Breaking, Milling, Sieving, Compacting, Granulation, Micronisation)
- Special customized packaging















GMP

Kirsch Pharma's production facilities comply with current and anticipated future national and international GMP standards for both APIs and excipients along with standards for nutritional quality. Additionally the whole Kirsch Pharma group follows corporate GMP systems and standards.

We have implemented pharmaceutical standards in accordance with:

ICHQ7 / EU GMP part 2

EXIPEC GMP

AMG / AMWHV





















■ PRODUCT GROUPS

- Salts in premium quality
- Organic compounds in premium quality
- Blends
- **APIs**

Further available in our subsidiaries

- Hormones
- Oils
- Herbal extracts



















SALTS IN PREMIUM QUALITY

Potassium

Sodium

Calcium

Magnesium

Iron

Zinc

Copper

Manganese etc.

Acetates

Bromides

Carbonates

Chlorides

Citrates

Formiates

Hydroxides

Nitrates

Oxides

Phosphates

Sulphates etc.









ORGANIC COMPOUNDS OF PREMIUM QUALITY

- Urea
- Dextrose
- Sugar alcohols
- Amino acids and Cholines
- Vitamins
- Acetic acid
- Lactic acid etc.





















QUALITY MANAGEMENT SYSTEM

- Integrated quality management system
- Certification
- Supplier / co-producer qualification
- GMP-compliant quality assurance
- GMP-compliant quality control



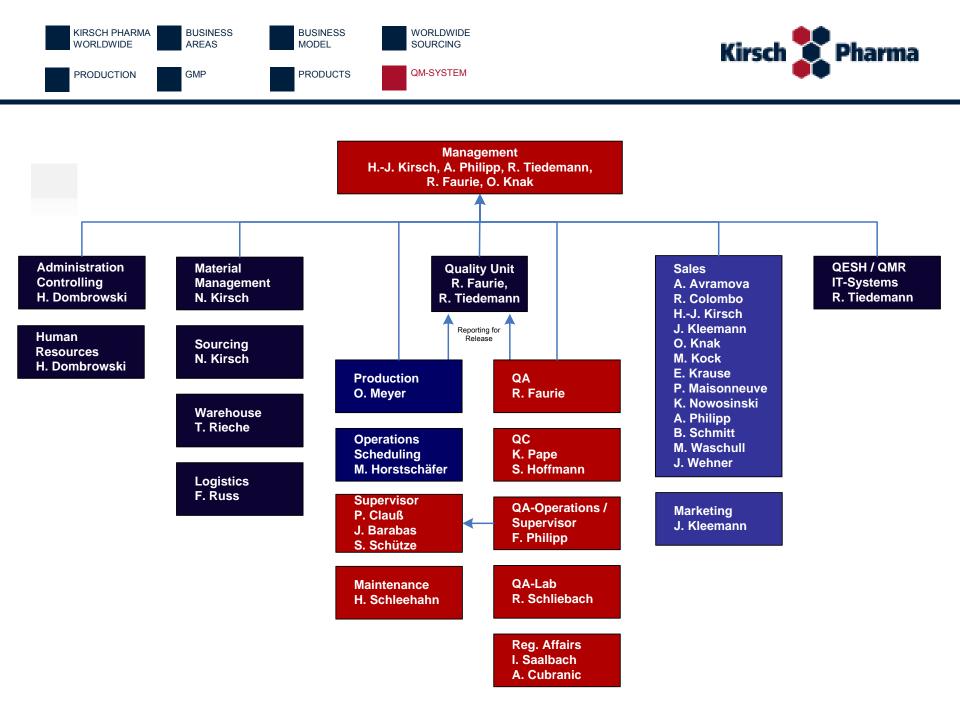




Successfully qualified by leading pharmaceutical companies























ISO 9001

FSSC 22000

GMP+









PRODUCTION















HALAL



KOSHER



Further certifications:















AREAS

BUSINESS









GMP



Staatliches Gewerbeaufsichtsamt Braunschweig Behörde für Arbeits-, Umwelt- und Verbraucherschutz

Zertifikat-Nr./Certificate no: DE_NI_01_GMP_2014_0012 Aktenzeichen/Reference Number: 41401 02 03

CERTIFICATE OF GMP COMPLIANCE OF A

MANUFACTURER

Part 1

Issued following an inspection in accordance with

· Art. 111 (5) of Directive 2001/83/EC

following:

Site address

Erzwäsche 2

38229 Salzgitter

Kirsch Pharma GmbH

Kirsch Pharma GmbH

BESTÄTIGUNG DER ÜBEREINSTIMMUNG EINES HERSTELLERS MIT GMP

Teil 1

Ausgestellt nach einer Inspektion gemäß · Art. 111 (5) der Richtlinie 2001/83/EG

Die zuständige deutsche Überwachungsbehörde The competent authority of GERMANY confirms the bestätigt:

Kirsch Pharma GmbH

Anschrift der Retriebsstätte Kirsch Pharma GmbH Erzwäsche 2 38229 Salzgitter

 Ist Wirkstoffhersteller und wurde inspiziert gemäß Art. 111 (1) der Richtlinie 2001/83/EG umgesetzt in deutsches Recht durch: § 64 Abs. 1 Arzneimittelgesetz

Aufgrund der aus der letzten Inspektion vom From the knowledge gained during the inspection of 15. Januar 2014 gewonnenen Erkenntnisse wird für die this manufacturer, the latest of which was conducted on oben genannte Bertriebsstätt des Herstellers die 15. January 2014, it is considered that it complies with Obereinstimmung mit den Anforderungen der Guten the Good Manufacturing Practice requirements referred Herstellungspraxis festgestellt, die sich aus

· den GMP-Grundsätzen für Wirkstoffe gemäß - Artikel 47 der Richtlinie 2001/83/EG

• the principles of GMP for active substances referred

· Is an active substance manufacturer that has been

Sect 64 para 1 Arzneimittelgesetz (German Drug Law)

- Article 47 of Directive 2001/83/EC

inspected in accordance with - Art. 111 (1) of Directive 2001/83/EC transposed in the following national legislation

Dieses Zertifikat bestätigt den Status der Betriebsstätte This certificate reflects the status of the manufacturing zum Zeitpunkt der oben genannten Inspektion. Es site at the time of the inspection noted above and

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inspection mer last of the mer

sollte nicht zur Bestätigung der Übereinstimmung should not be relied upon to reflect the compliance herangezogen werden, wenn selt der genannten status if more than three years have alapsed since the inspektion mehr als der Jahre vergangen sind. Nach date of that inspection, after which time the issuing

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Teil 2

Part 2

Manufacture of active substance. Names of substances

· Wirkstoffe

Substances

subject to inspection

Potassium Chloride

Magnesium Hydroxide

Magnesium Oxide heavy

Sodium Carbonate light

Sodium Chloride

Urea

Calcium Carbonate light

Calcium Chloride Dihydrate

Magnesium Chloride Hexahydrate

Magnesium Sulfate Heptahydrate

Sodium Hydrogen Carbonate

Calcium Carbonate

Wirkstoffherstellung. Namen der Substanzen, die Gegenstand der Inspektion waren: Calciumcarbonat

Calciumcarbonat leicht Calciumchlorid-Dihydrat Kaliumchlorid

Magnesiumchlorid-Hexahydrat Magnesiumhydroxid Magnesiumoxid schwer Magnesiumsulfat-Heptahydrat Natriumhydrogencarbonat

Natriumcarbonat leicht Natriumchlorid Harnstoff

Einschränkungen oder klarstellende Anmerkungen betreffend den Umfang des Zertifikats:

Anmerkungen: Der Umfang des Zertifikates umfasst ausschließlich das Umfüllen einschließlich Abfüllen, das filling as well as decanting, breaking, sieving, packaging, Brechen, das Sieben, das Abpacken, das Kennzeichnen labelling and release of active pharmaceutical und die Freigabe der Wirkstoffe.

Any restrictions or clarifying remarks related to the scope of this certificate:

13. Juni 2014

Im Auftrag

13 June 2014 On behalf

Behörde

lame und Unterschrift des Bearbeiters der zuständigen Name and signature of the authorised person of the Competent Authority

Andreas Meißner Staatliches Gewerbeaufsichtsamt Braunschweig Inspektorat Braunschweig

Ludwig-Winter-Str. 2 38120 Braunschweig Deutschland

Tel: +49(0)531 35476151 Fax: +49(0)531 35476333 Andreas Meißner

Staatliches Gewerbeaufsichtsamt Braunschweig Inspektorat Braunschweig Ludwig-Winter-Str. 2 38120 Braunschweig Deutschland

Tel.: +49(0)531 35476151 Fax: +49(0)531 35476333

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Unterschrift: Andreas Meißner

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