

Summary of Product Characteristics (SmPC)	 <i>Biological E. Limited</i>
DTwP-HepB-IPV-Hib Vaccine [HEXABEV™]	

1. NAME OF THE MEDICINAL PRODUCT

Diphtheria, Tetanus, Pertussis (Whole Cell), Hepatitis B (rDNA), inactivated Poliomyelitis and Haemophilus Influenzae Type b conjugate vaccine (Adsorbed) I.P. - DTwP-HepB-IPV-Hib Vaccine.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each dose of 0.5 mL contains

Composition	Quantity
Diphtheria Toxoid	≥ 30 IU
Tetanus Toxoid	≥ 60 IU
<i>B. Pertussis</i> (Whole cell, Killed)	≥ 4 IU
r-HBsAg	12.5 µg
Inactivated Poliomyelitis Virus Type -1 (S19/Mah) [#] Type -2 (S19/MEF) [#] Type -3 (S19/Skt) [#]	40 D-antigen units 8 D-antigen units 32 D-antigen units
Purified Capsular Polysaccharide of Hib (PRP) covalently linked to 20 - 36.7 µg of Tetanus Toxoid	11 µg
Al ⁺⁺⁺ (As AlPO ₄)	≤ 1.25 mg
2-Phenoxyethanol I.P.	4.0 mg

[#] Produced in Vero cells

3. PHARMACEUTICAL FORM

Dosage Form: Suspension for intramuscular injection.

4. CLINICAL PARTICULARS

4.1 Therapeutic Indications

DTwP-HepB-IPV-Hib Vaccine Indicated for active immunization against Diphtheria, Tetanus, Pertussis, Hepatitis B, Poliomyelitis and invasive diseases caused by Haemophilus influenzae type b in 6 to 8 weeks old healthy infants, following a 6- 10-14 weeks dosing schedule.

4.2 Posology and Method of Administration

DTwP-HepB-IPV-Hib Vaccine is to be administered as three dose primary series with an interval of at least four weeks between the doses in infants starting at six weeks of age. In countries, where peri-natal transmission of hepatitis B virus (HBV) is common, the first dose

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of Hepatitis B should be given as soon as possible after birth. In this case, the DTwP-HepB-IPV-Hib Vaccine can be used to complete the primary series from 6 weeks of age.

DTwP-HepB-IPV-Hib Vaccine is an adjuvanted vaccine which appear whitish turbid liquid in which aluminium phosphate adjuvant tends to settle down slowly on storage. The vaccine should be shaken well to obtain a uniform, whitish translucent suspension before use. Prior to administration, the vaccine vial should be visually checked for complete suspension and presence of any particulate matter or other colouration, if any. If in doubt, do not use the contents of the vial. Sterile needle and syringe should be used for withdrawal of the vaccine from the vial. The vaccine should be administered intramuscularly. The preferred site in infants is anterolateral aspect of the mid/upper thigh. The vaccine should not be injected in the gluteal area. The vaccine should not be injected intradermally, subcutaneously or intravenously, since the safety and immunogenicity of these routes have not been evaluated.

A sterile syringe and sterile needle must be used for the injection. Any other injection if co administered with DTwP-HepB-IPV-Hib Vaccine should be given at a different site.

4.3 Contraindications

Known hypersensitivity to any component of the vaccine, or a severe reaction to a previous dose of the combination vaccine or any of its constituents is an absolute contraindication to subsequent doses of the combination vaccine or the specific vaccine known to have provoked an adverse reaction.

There are few contraindications to the first dose of DTwP containing vaccine. Conditions like convulsions/seizures or abnormal cerebral signs in the newborn period or other serious neurological abnormalities are contraindications to the pertussis component.

In these circumstances pertussis vaccination should be discontinued and the vaccination course should be continued with diphtheria-tetanus, hepatitis B, polio and Hib vaccines. The vaccine will not harm individuals currently or previously infected with the hepatitis B virus.

Generally, vaccination must be postponed in cases of acute moderate or severe febrile illness. The presence of a minor infection and/or low-grade fever does not constitute a contraindication.

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4.4 Special Warning and Precautions for Use

As with any vaccine, a protective immune response may not be elicited in all vaccinees. DTwP-HepB-IPV-Hib Vaccine will not prevent disease caused by pathogens other than *Corynebacterium diphtheriae*, *Clostridium tetani*, *Bordetella pertussis*, hepatitis B virus, poliovirus or *Haemophilus influenzae* type b. It does not prevent Hepatitis caused by other agents different from HBV (as virus A, C and E) but it is considered effective in preventing Hepatitis caused by the delta agent. Hib vaccine does not protect against disease due to other types of *Haemophilus influenzae* nor against meningitis caused by other organisms. Due to the long incubation period of Hepatitis B (up to 6 months or more), cases where prior exposure to Hepatitis B virus has taken place, vaccination may not be effective.

Vaccination should be preceded by a review of the medical history (especially with regard to previous vaccination and possible occurrence of undesirable events) and a clinical examination. In persons who have a history of serious or severe reaction within 48 hours of a previous injection with a vaccine containing similar components, administration of DTwP-HepB-IPV-Hib Vaccine must be carefully considered. If any of the following events occur in temporal relation to receipt of this vaccine, the decision to give subsequent doses of vaccine containing the pertussis component should be carefully considered.

- Temperature of $\geq 40^{\circ}\text{C}$ within 48 hours of vaccination not due to another identifiable cause.
- Collapse or shock-like state (hypotonic-hypo responsive episode) within 48 hours of vaccination.
- Persistent, inconsolable crying lasting ≥ 3 hours, occurring within 48 hours of vaccination.
- Convulsions with or without fever occurring within three days.

HIV infection is not considered as a contraindication for diphtheria, tetanus, pertussis Hepatitis-B, Hib and polio vaccination. The expected immunological response may not be obtained after vaccination of immunosuppressed patients, eg., patients on immunosuppressive therapy.

As with all injectable vaccines, appropriate medical treatment and supervision should always be readily available in case of a rare anaphylactic event following the administration of the vaccine, 1:1000 adrenaline should be available for immediate treatment if such reaction occurs.

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For this reason, the vaccinee should remain under medical supervision for 30 minutes after immunization.

DTwP-HepB-IPV-Hib Vaccine should not be given to children with any coagulation disorder, including thrombocytopenia that would contraindicate intramuscular injection unless the potential benefit clearly outweighs the risk of administration.

Infants and children with a history of convulsions in first-degree family members (i.e. siblings and parents) when administered DTP containing vaccine have an increased risk for neurologic events and permanent neurologic damage when compared with infants without such history.

Infants and children with recognized possible or potential underlying neurologic conditions seem to be at enhanced risk for the appearance of manifestation of the underlying neurologic disorder within two- or three-days following vaccination.

The administration of DTwP-HepB-IPV-Hib vaccine to children with proven or suspected underlying neurologic disorders that are not actively evolving must be decided on an individual basis.

This vaccine is NOT to be used for the treatment of Diphtheria, Tetanus, Pertussis, Hepatitis-B, Poliomyelitis or H influenzae type b infection.

4.5 Drug interactions

Concomitant use with other vaccines: DTwP-HepB-IPV-Hib Vaccine can be administered concomitantly with a pneumococcal polysaccharide conjugate vaccine and Oral Rota virus vaccine, which demonstrated that the safety and immunogenicity of the administered vaccines were unaffected. If co-administration with another injectable vaccine is considered, immunization should be carried out on separate injection sites.

DTwP-HepB-IPV-Hib Vaccine must not be mixed with any other vaccines or other parenterally administered medicinal products. As with other intramuscular injections, use with caution in patients on anticoagulant therapy. Immunosuppressive therapies, including irradiation, antimetabolites, alkylating agents, cytotoxic drugs and corticosteroids (used in greater than physiologic doses) may reduce the immune response to vaccines. Short-term (< 2 weeks) corticosteroid therapy should not be immunosuppressive.

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4.6 Use in Special Populations (such as pregnant women, lactating women)

This vaccine is not intended for administration to women of child-bearing age, thus human data on use during pregnancy or lactation are not available. It is not known whether the vaccine is excreted in human milk.

4.7 Effect on Ability to Drive and Use Machines

Not relevant. No studies on the effect of DTwP-HepB-IPV-Hib Vaccine on the ability to drive and use machines have been performed.

4.8 Undesirable Effects

Clinical Trial Experience: The safety of DTwP-HepB-IPV-Hib Vaccine was established in 6-8-week-old infants in 6-10-14 weeks primary schedule and in 16-24 months old healthy toddlers as single booster dose. Within each system organ class (SOC) the adverse reactions were ranked under headings using the following convention:

Expected frequency of adverse events in vaccinees

Very common $\geq 10\%$

Common $\geq 1\%$ and $< 10\%$

Uncommon $\geq 0.1\%$ and $< 1\%$

Rare $\geq 0.01\%$ and $< 0.1\%$

Very rare $< 0.01\%$

Systemic:

Very common ($\geq 10\%$)

- Fever/Pyrexia

Common ($\geq 1\%$ and $< 10\%$)

- Irritability Postvaccinal
- Decreased Appetite

Uncommon ($\geq 0.1\%$ and $< 1\%$)

- Diarrhoea
- Vomiting
- Somnolence

Local:

Very common ($\geq 10\%$)

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- Injection site pain (tenderness)

Common ($\geq 1\%$ and $< 10\%$)

- Injection site erythema
- Injection site induration/swelling

Summary of safety profile:

In the Phase I study (BECT078), 48 healthy toddlers aged 16 to 24 months were enrolled and randomized in a 1:1 to receive either BE's Liquid Hexavalent vaccine containing full strength IPV or BE's Liquid Hexavalent vaccine containing half strength IPV as a single booster in children who were primed with DTP containing vaccine. The most commonly reported adverse events in BE's Liquid Hexavalent vaccine containing full strength IPV were Pyrexia [10 AEs in 10 (41.67%) subjects], Injection site pain [7 AEs in 7 (29.17%) subjects], Injection site erythema [1 AE in 1 (4.17%) subject] and Injection site induration [1 AE in 1 (4.17%) subject]. No adverse events were reported within 60 minutes' post vaccination. All the adverse events were reported during the 7-day diary period only and solicited in nature.

MedDRA SOC	Frequency	Adverse reactions
General disorders and administration site conditions	Very common	Injection site pain, Pyrexia
	Common	Injection site erythema, Injection site induration,

In the Phase II study (BECT084), 180 healthy infants aged 6 to 8 weeks were enrolled and randomized in a 1:1:1 to received either BE's Liquid Hexavalent vaccine containing full strength IPV or BE's Liquid Hexavalent vaccine containing half strength IPV or a licensed Liquid hexavalent vaccine (DTwP-HepB-IPV-Hib) as a three dose primary series in 6-10-14 weeks schedule.

The most commonly reported adverse events in BE's Liquid Hexavalent vaccine containing full strength IPV were Injection site pain [29 AEs in 20 (33.33%) subjects], Pyrexia [26 AEs in 17 (28.33%) subjects], Injection site swelling [17 AEs in 13 (21.67%) subjects], Injection site erythema [13 AEs in 8 (13.33%) subjects], Irritability Postvaccinal [7 AEs in 6 (10.00%) subjects], Crying [6 AEs in 5 (8.33%) subjects], Decreased Appetite [6 AEs in 5 (8.33%) subjects] and Somnolence [3 AEs in 3 (5.00%) subjects].

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No adverse events were reported within 60 minutes' post vaccination in the study. Majority of the adverse events were mild in intensity, reported during the 7-day diary period and are solicited in nature.

MedDRA SOC	Frequency	Adverse reactions
General Disorders and Administration Site conditions	Very common	Injection Site Pain, Injection Site Swelling, Injection Site Erythema and Pyrexia
	Common	Irritability Postvaccinal and Crying
Metabolism And Nutrition Disorders	Common	Decreased Appetite
Nervous System Disorders	Common	Somnolence

In the Phase III study (BECT094), 4,012 healthy infants aged 6 to 8 weeks were enrolled and randomized in a 2:1 ratio to receive BE's Liquid Hexavalent vaccine containing full strength IPV and Licensed comparator Hexavalent vaccine (HEXASIIIL) respectively as a three dose primary series in 6-10-14 weeks schedule. Overall, the proportion of participants experiencing adverse events were similar between the two vaccine groups. The most commonly reported adverse events in BE's Liquid Hexavalent vaccine arm are Pyrexia [451 AEs in 411 (13.00%) subjects], Injection site pain [337 AEs in 306 (9.68%) subjects], Injection site swelling [165 AEs in 153 (4.84%) subjects], Injection site erythema [128 AEs in 124 (3.92%) subjects], Crying [28 AEs in 28 (0.89%) subjects], Irritability postvaccinal [43 AEs in 43 (1.36%) subjects], Vomiting [13 AEs in 11 (0.35%) subjects], Decreased appetite [14 AEs in 14 (0.44%) subjects] and Somnolence [7 AEs in 7 (0.22%) subjects].

Adverse events reported during the study period Day 84 to Day 236, 3951 participants (3119 in BE's LHV arm and 832 in Licensed comparator Hexavalent vaccine (HEXASIIIL) arm) are part of safety population, 94/3119 (3.01%) infants reported 104 events and 28/832 (3.37%) infants reported 29 events in BE's LHV and control arms respectively.

The most commonly reported adverse events in BE's LHV arm were Pyrexia [52 AEs in 52 (1.67%) participants], Nasopharyngitis [11 AEs in 11 (0.35%) participants], Cough [10 AEs in 10 (0.32%) participants], Vomiting [8 AEs in 8 (0.26%) participants] and Diarrhoea [6 AEs in 6 (0.19%) participants].

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Serious adverse events (SAEs) were reported in 0.13% of participants in the BE's LHV treatment arm and 0.35% of participants in the HEXASIIL treatment arm. Reported SAEs in the BE's LHV arm included pyrexia, bronchiolitis, lower respiratory tract infection, pneumonia and wheezing, while those in the HEXASIIL arm included sudden death, pyrexia, gastroenteritis, parotitis and dehydration. All reported SAEs were assessed as unrelated to the study vaccines. Majority of reported AEs were mild in intensity and related to the study vaccine. Most were solicited events occurring within seven days post-vaccination. The pattern and nature of adverse events observed were consistent with the expected safety profile of other licensed hexavalent vaccines. Overall, the safety profile of Biological E's Liquid Hexavalent Vaccine was found to be acceptable, with respect to the overall frequency of adverse events, related adverse events, and medically attended events.

MedDRA SOC	Frequency	Adverse reactions
General Disorders and Administration Site conditions	Very common	Pyrexia
	Common	Injection Site Pain, Injection Site Swelling, Injection Site Erythema and Irritability Postvaccinal
	Uncommon	Crying
Gastrointestinal disorders	Uncommon	Diarrhoea, Vomitting
Metabolism And Nutrition Disorders	Uncommon	Decreased Appetite
Nervous System Disorders	Uncommon	Somnolence

4.9 Overdose

No case of overdose has been reported. There is no specific treatment for an overdose with DTwP-HepB-IPV-Hib vaccine. In the event of an overdose, the individual should be monitored and provided with symptomatic treatment as appropriate.

5. PHARMACOLOGICAL PROPERTIES

5.1 Mechanism of Action

DTwP-HepB-IPV-Hib vaccine induces the production of antibodies against diphtheria, tetanus, pertussis, hepatitis B, poliomyelitis and invasive infections caused by *Haemophilus influenzae* type b.

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5.2 Pharmacodynamic Properties

Pharmacotherapeutic Group: Bacterial and viral vaccines combined, ATC code J07CA09.

Immunogenicity: The immunogenicity of DTwP-HepB-IPV-Hib vaccine has been evaluated in a pivotal, multicentric, randomized, controlled clinical trial (BECT094). After 3-dose primary vaccination schedule in infants, robust immune response was achieved for all antigens and non-inferiority was demonstrated against licensed vaccine.

Immune response

In the Phase I study (BECT078), 48 healthy toddlers aged 16 to 24 months were enrolled and randomized in a 1:1 to receive either BE's Liquid Hexavalent vaccine containing full strength IPV or BE's Hexavalent vaccine containing half strength IPV as a single booster in children were primed with DTP containing vaccine. The secondary per protocol (PP) analysis of immunogenicity at Day 28 showed seroprotection rates (SPR) / seroconversion rates (SCR) of 83.33%, 100%, 87.50%, 83.33%, 95.83%, 95.83%, 91.67% & 100% against Diphtheria, Tetanus, Hepatitis-B, Hib (long term), Hib (short term), Polio serotype 1, Polio serotype 2 & Polio serotype 3 respectively in BE's LHV with full dose of IPV and 83.33%, 95.83%, 91.67%, 83.33%, 95.83%, 100%, 87.50% & 95.83% against Diphtheria, Tetanus, Hepatitis B, Hib (long term), Hib (short term), Polio serotype 1, Polio serotype 2 & Polio serotype 3 respectively in BE's LHV with half dose of IPV.

In the Phase II study (BECT084), 180 healthy infants aged 6 to 8 weeks were enrolled and randomized in a 1:1:1 to received either BE's Liquid Hexavalent vaccine containing full strength IPV or BE's Hexavalent vaccine containing half strength IPV or a licensed Liquid hexavalent vaccine (DTwP-HepB-IPV-Hib) as a three dose primary series in 6-10-14 weeks schedule. The secondary PP analysis of immunogenicity at Day 84 showed seroprotection rates (SPR) / seroconversion rates (SCR) of 94.5%, 100%, 94.5%, 74.5%, 100%, 100%, 100%, 96.4%, 98.2%, 96.4% and 98.2% against Diphtheria, Tetanus, Hepatitis-B, HIB (long term), HIB (short term), Polio serotype 1 Sabin & Salk, Polio serotype 2 Sabin & Salk and Polio serotype 3 Sabin & Salk respectively in BE's LHV with half dose of IPV, 94.7%, 100%, 96.5%, 82.5%, 98.2%, 100%, 100%, 100%, 100%, 98.2% and 98.2% against Diphtheria, Tetanus, Hepatitis-B, Hib (long term), Hib (short term), Polio serotype 1 Sabin & Salk, Polio serotype 2 Sabin & Salk and Polio serotype 3 Sabin & Salk respectively in BE's LHV with full dose of

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IPV and 98.2%, 100%, 91.1%, 91.1%, 100%, 100%, 100%, 100%, 100%, 100% and 100% against Diphtheria, Tetanus, Hepatitis-B, Hib (long term), Hib (short term), Polio serotype 1 Sabin & Salk, Polio serotype 2 Sabin & Salk and Polio serotype 3 Sabin & Salk respectively in SIIL's HEXASIIL vaccine. The secondary PP analysis of immunogenicity at Day 84 showed seroconversion rates (SCR) of 54.5% & 96.4% against Bordetella PT & Bordetella Agglutinin respectively in BE's LHV with half dose of IPV, 63.2% & 87.7% against Bordetella PT & Bordetella Agglutinin respectively in BE's LHV with full dose of IPV and 64.3% & 87.5% against Bordetella PT & Bordetella Agglutinin respectively in SIIL's HEXASIIL vaccine.

In the pivotal Phase III trial (BECT094), 4,012 healthy infants aged 6 to 8 weeks were enrolled and randomized in a 2:1 to received BE's Liquid Hexavalent vaccine or a licensed Liquid hexavalent vaccine (HEXASIIL) respectively as a three dose primary series in 6-10-14 weeks schedule. The immunogenicity cohort comprised **2,225** participants. The DTwP-HepB-IPV-Hib vaccine demonstrated non-inferiority to the licensed comparator for all antigens.

Seroprotection/Seroconversion rates one month after three dose primary vaccination

Antigen	SPR threshold or SCR	HEXABEV™ cohort Post-Vaccination titers		HEXASIIL Cohort Post-Vaccination titers	
		N ; n	% SPR or SCR (95% CI)	N ; n	% SPR or SCR (95% CI)
Hib-PRP	≥ 0.15 mg/mL	1032; 1015	98.4(97.6-99.1)	511;492	96.3(94.6-97.9)
Diphtheria Toxoid	≥ 0.1 IU/mL	1032; 994	96.3(95.2-97.5)	511;496	97.1(95.6-98.5)
Tetanus Toxoid	≥ 0.1 IU/mL	1032; 1028	99.6(99.2-100)	511;510	99.8(99.4-100)
Whole Cell Pertussis – Agglutination Titer	As Per SCR definition*	1032; 995	96.4(95.3-97.5)	511;472	92.4(90.1-94.7)
Pertussis Toxin	As Per SCR definition+	1032; 684	66.3(63.4-69.2)	511;308	60.3(56.0-64.5)
Hepatitis-B	≥10 mIU/mL	1032; 935	90.6(88.8-92.4)	511;469	91.8(89.4-94.2)
Polio Type 1	SNT ₅₀ ≥8	1029; 1028	99.9(99.7-100)	505; 503	99.6(99.1-100)
Polio Type 2	SNT ₅₀ ≥8	1027; 1021	99.4(98.9-99.9)	505; 498	98.6(97.6-99.6)

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Antigen	SPR threshold or SCR	HEXABEV™ cohort Post-Vaccination titers		HEXASIIIL Cohort Post-Vaccination titers	
		N ; n	% SPR or SCR (95% CI)	N ; n	% SPR or SCR (95% CI)
Polio Type 3	SNT ₅₀ ≥8	1029; 1016	98.7(98.1-99.4)	505; 500	99.0(98.1-99.9)

N: Number of individuals analysed (per protocol set)

n: Number of subjects achieving seroprotection/seroconversion.

* (Seroconversion): If Pre-Vaccination Titer is 2; Post-Vaccination Titer must be ≥ 8. If Pre-Vaccination Titer is ≥ 4; Post-Vaccination Titer must be ≥ 2-fold higher than Pre-Vaccination Titer.

+ (Seroconversion): If Pre-Vaccination Titer is 2.5 IU/mL; Post-Vaccination Titer must be ≥ 10 IU/mL. If Pre-Vaccination Titer is ≥ 5 IU/mL; Post-Vaccination Titer must be ≥ 2-fold higher than Pre-Vaccination Titer.

5.3 Pharmacokinetic Properties

Evaluation of pharmacokinetic properties is not required for vaccines.

6. PRECLINICAL SAFETY DATA

6.1 Animal Toxicology or Pharmacology

Preclinical studies of single and repeated dose intramuscular toxicity study of Diphtheria, Tetanus, Pertussis (Whole Cell), Hepatitis B (rDNA), inactivated Poliomyelitis and Haemophilus Influenzae Type b conjugate vaccine (Adsorbed) - DTwP-HepB-IPV-Hib were conducted in Swiss Albino Mice and Sprague Dawley Rats and New Zealand White Rabbits

Based on findings, it was concluded that the administration of the Hexavalent Vaccine (DTwP-HepB-IPV-Hib) via a single intramuscular dose to Swiss Albino Mice and Sprague Dawley Rats was well tolerated. No irritation, gross, or histopathological changes were observed at the injection site under the experimental conditions. In repeated dose studies on Sprague Dawley Rats (Days 1, 15, 29, and 43), no adverse toxicity was noted, and a good immunogenic response was observed. Minor changes at the injection site, lymph nodes, and Peyer's patches were considered expected immunological reactions and were reversible, thus non-adverse. In New Zealand White Rabbits, repeated doses led to gross changes at the injection site and in ileac and popliteal lymph nodes. Microscopically, increased lymphocyte cellularity in various lymph nodes and inflammatory changes at the injection site were observed. These findings were regarded as non-adverse, expected immune responses to the repeated administration of the vaccine, with no long-term effects anticipated.

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7. DESCRIPTION

DTwP-HepB-IPV-Hib Vaccine is a combination of diphtheria-tetanus-whole cell pertussis-hepatitis B- inactivated poliovirus and Haemophilus influenzae type b vaccine. This hexavalent vaccine is intended for vaccination against diphtheria, tetanus, pertussis, hepatitis B, H. influenzae type b and polio diseases in children from 6 weeks of age.

8. PHARMACEUTICAL PARTICULARS

8.1 List of Excipients

List of Excipients

- Aluminium Phosphate as Al+++
- 2 Phenoxyethanol I.P. (as preservative)

8.2 Incompatibilities

The product should not be mixed with any other medicinal products or active immunizing agents.

8.3 Shelf Life

12 months from the date of manufacturing. The manufacturing date and expiry date of the vaccine is indicated on the label and carton of the product.

9. NATURE AND CONTENTS OF CONTAINER

DTwP-HepB-IPV-Hib Vaccine is filled in USP type I glass vials and closed using bromobutyl rubber stoppers and sealed with aluminium flip-off seals.

The vaccine is filled into single dose and five dose vial presentations. The single dose and multi dose presentation are packed into a box of 48 vials.

The container and the box are labelled with appropriate product labels.

The vaccine is offered in the following presentations:

- Single dose Vial of 0.5 mL
- Multi dose Vial of 2.5 mL

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9.1 Storage and Handling Instructions

9.1.1 Special precautions for storage

Store at +2°C to +8°C. DO NOT FREEZE. Discard if found frozen. Shake vigorously before use. Keep out of reach of children.

Handling of Multidose Vial:

Once opened, multi-dose vials should be kept between +2°C and +8°C. Multi-dose vials of DTwP-HepB-IPV-Hib vaccine from which one or more doses of vaccine have been removed during an immunization session may be used in subsequent immunization sessions for up to a maximum of 28 days, provided that all of the following conditions are met:

- The vaccine is approved for use for up to 28 days after opening the vial
- The expiry date has not passed
- The vaccine vial has been, and will continue to be, stored at manufacturer recommended temperatures; furthermore, the vaccine vial monitor, if one is attached, is visible on the vaccine label and is not past its discard point, and the vaccine has not been damaged by freezing.

9.1.2 Special Precautions for Disposal

Any unused product or waste material should be disposed as per local regulatory requirements.

10. PATIENT COUNCELLING INFORMATION

DTwP-HepB-IPV-Hib Vaccine protects your child against six serious diseases: Diphtheria, Tetanus, Pertussis (whooping cough), Hepatitis B, Polio and *Haemophilus influenzae* type b (Hib). It is usually given as an injection in the mid/upper thigh at 6, 10, and 14 weeks of age, as part of the national immunization schedule. Before vaccination, inform your healthcare provider if your child has a fever, severe illness, or any allergies to previous vaccines. Mild illnesses, such as a common cold, are not considered contraindications, and vaccination may be administered at the physician's discretion.

After vaccination, your child may experience mild fever, pain, redness, or swelling at the injection site. These reactions are normal and usually resolve within a few days. You can give paracetamol for fever or discomfort as advised by your doctor. Severe allergic reactions are very rare. If your child develops difficulty breathing, persistent crying, or high fever, seek medical attention immediately.

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11. MARKETING AUTHORISATION HOLDER

Biological E. Limited

Regd. office: 18/1 & 3, Azamabad, Hyderabad, Telangana - 500 020, INDIA.

Manufacturing Site Address:

M/s. Biological E. Limited (SEZ Site)

Sy. No. 549, 550 & 552 to 556

Kolthur Village, Shameerpet,

Medchal- Malkajgiri District,

Telangana - 500 078, INDIA.

Web site: www.biologicale.com

12. DETAILS OF MARKETING AUTHORISATION NUMBER(S)

MA Permission No: MF/BIO/26/000057 dated 06.05.2026

13. DATE OF REVISION

July 2026